STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY ("NIPSCO") FOR (1) AUTHORITY TO MODIFY ITS RATES AND CHARGES FOR ELECTRIC UTILITY SERVICE; (2) APPROVAL OF NEW SCHEDULES OF RATES AND CHARGES APPLICABLE THERETO; (3) APPROVAL OF REVISED DEPRECIATION ACCRUAL RATES; (4) INCLUSION IN ITS BASIC RATES AND CHARGES OF THE COSTS ASSOCIATED WITH CERTAIN PREVIOUSLY APPROVED QUALIFIED POLLUTION CONTROL PROPERTY PROJECTS; (5) AUTHORITY TO IMPLEMENT A RATE ADJUSTMENT MECHANISM PURSUANT TO IND. CODE § 8-1-2-42(a) TO (A) TIMELY RECOVER CHARGES AND CREDITS FROM REGIONAL TRANSMISSION ORGANIZATIONS AND NIPSCO'S TRANSMISSION REVENUE REQUIREMENTS; (B) TIMELY RECOVER NIPSCO'S PURCHASED POWER COSTS; AND (C) ALLOCATE NIPSCO'S OFF SYSTEM SALES REVENUES; (6) APPROVAL OF VARIOUS CHANGES TO NIPSCO'S ELECTRIC SERVICE TARIFF INCLUDING WITH RESPECT TO THE GENERAL RULES AND REGULATIONS, THE ENVIRONMENTAL COST RECOVERY MECHANISM AND THE ENVIRONMENTAL EXPENSE MECHANISM; (7) APPROVAL OF THE CLASSIFICATION OF NIPSCO'S FACILITIES AS TRANSMISSION OR DISTRIBUTION IN ACCORDANCE WITH THE FEDERAL ENERGY REGULATORY COMMISSION'S SEVEN-FACTOR TEST; AND (8) APPROVAL OF AN ALTERNATIVE REGULATORY PLAN PURSUANT TO IND. CODE § 8-1-2.5-1 *ET SEQ.* TO THE EXTENT SUCH RELIEF IS NECESSARY TO EFFECT THE RATEMAKING MECHANISMS PROPOSED BY NIPSCO.	)	**CAUSE NO. 43526**

Prepared Direct Testimony and Exhibits

of

NORTHERN INDIANA PUBLIC SERVICE COMPANY

Volume 5 of 6

Vincent V. Rea, Paul R. Moul, John P. Kelly

August 29, 2008

FILED

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INDIANA UTILITY
REGULATORY COMMISSION

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Petitioner's Exhibit VVR-1

NORTHERN INDIANA PUBLIC SERVICE COMPANY

IURC CAUSE NO. 43526

VERIFIED DIRECT TESTIMONY

OF

VINCENT V. REA

DIRECTOR OF TREASURY AND CORPORATE FINANCE

SPONSORING PETITIONER'S EXHIBIT VVR-2

VERIFIED DIRECT TESTIMONY OF VINCENT V. REA

Q1. Please state your name and business address.

A1. My name is Vincent V. Rea. My business address is 801 East 86th Avenue, Merrillville, Indiana 46410.

Q2. By whom are you employed and in what capacity?

A2. I am employed by NiSource Corporate Service Company ("NCS"). My position is Director of Treasury and Corporate Finance for NiSource Inc. ("NiSource") and Assistant Treasurer of Northern Indiana Public Service Company ("NIPSCO"). I also serve as Assistant Treasurer of NiSource Finance Corp. ("NFC").

Q3. What are your responsibilities as Director of Treasury and Corporate Finance?

A3. As Director of Treasury and Corporate Finance, I am responsible for external capital raising activities for NiSource and inter-company financing activities among all NiSource subsidiaries.

Q4. Please summarize your educational qualifications.

A4. I received a M.B.A in Finance from Indiana University - Bloomington, Indiana and a B.A. in Accounting/Finance from Lake Forest College - Lake Forest, Illinois.

Q5. Do you hold any professional designations?

A5. Yes. I am a "Certified Pubic Accountant–State of Illinois" and a "Certified Treasury Professional."

Q6. Are you a member of any industry or professional organizations?

A6. Yes. I am a member of the American Institute of Certified Public Accountants and Association for Financial Professionals (formerly Treasury Management Association).

Q7. Please describe your professional experience.

A7. I previously held positions of Vice President and Treasurer of ABC-NACO, Inc., an $800 million publicly-traded manufacturer of rail and flow control industrial products in Chicago, Illinois; Assistant Treasurer of Safety-Kleen Corp., Elgin, Illinois; and Manager of Finance with Motorola, Inc. in Schaumburg, Illinois.

Q8. Have you previously testified before this or any other regulatory commission?

A8. Yes. I have testified before the Massachusetts Department of Telecommunications and Energy regarding several matters, including participation by Bay State Gas Company ("Bay State"), a NIPSCO affiliate, in the NiSource Money Pool and also requests by Bay State for authorization to issue long-term debt. I have also submitted testimony to the New Hampshire Public Utilities Commission and the Maine Public Utilities Commission. I testified before this Commission in NIPSCO's recent financing proceeding, Cause No. 43370.

Q9. What is the purpose of your direct testimony?

A9. I will testify about NIPSCO's debt financing activities, credit ratings and cost of debt.

I. <u>NIPSCO'S DEBT FINANCING ALTERNATIVES</u>

Q10. How does NIPSCO use debt to finance its operations?

A10. NIPSCO finances its operations through four basic debt financing alternatives: (1) long-term inter-company notes issued to NFC for long-term financing requirements, (2) NiSource Money Pool borrowings for short-term liquidity and working capital needs, (3) Jasper County, Indiana Pollution Control Bonds ("Jasper County Bonds") which are tax-exempt debt securities used to finance specific pollution control improvements made to the R. M. Schahfer Generating Station, and (4) medium term notes.

II. <u>NIPSCO'S CREDIT RATINGS</u>

Q11. Why are credit ratings important to NIPSCO and NFC?

A11. Credit ratings are important because they directly influence the borrowing costs of corporate borrowers. Generally speaking, higher credit ratings result in lower borrowing costs for corporations, as investors accept a lower risk premium (yield) when they invest in safer, higher rated debt investments. Conversely, issuers of debt securities with lower credit ratings will pay higher risk premiums to compensate investors for accepting higher levels of credit risk. Although NIPSCO no longer directly issues debt securities to external investors, it does issue intermediate and long-term inter-company notes to NFC. As demonstrated by the Commission's Order dated February 6, 2008 in Cause No. 43370, the interest rate on NIPSCO's inter-company notes is directly influenced by the credit rating of NIPSCO that is in effect at the time of the inter-company note issuance. In its Order, the Commission approved a pricing mechanism whereby, "the interest rate of the Notes will be determined by the corresponding applicable Treasury yield (as reported in Federal Reserve Statistical Release, H.15 Selected Interest Rates (Daily)) effective on the date the Note is issued, plus the yield spread on corresponding maturities for utilities with a credit risk profile equivalent to [NIPSCO's] (as reported by Reuters Corporate Spreads for Utilities) effective on the date a Note is issued." *Re Financing*

Petition of Northern Ind. Pub. Serv. Co., Cause No. 43370 (IURC 2/6/08), p. 2. In similar fashion, the NFC credit ratings directly influence its borrowing costs through the same credit risk and yield spread mechanism, except that NFC raises capital in the external debt markets rather than through inter-company notes.

Q12. What are NIPSCO's current credit ratings?

A12. NIPSCO has a corporate credit rating of BBB- from Standard and Poor's ("S&P") and senior unsecured debt ratings of Baa2 from Moody's and BBB+ from Fitch.

Q13. How important is regulatory treatment to rating agencies?

A13. The rating agencies pay close attention to the treatment utility companies receive from their regulators. Supportive regulation enhances credit ratings and improves the ability of utility companies to attract capital and to finance at reasonable rates.

III. <u>WEIGHTED COST OF DEBT</u>

Q14. Have you reviewed <u>Petitioner's Exhibit LEM-5</u>, page 3 of 3, the exhibit to NIPSCO Witness Linda E. Miller's direct testimony that shows the calculation of the NIPSCO's weighted cost of long-term debt?

A14. Yes. I have reviewed this exhibit and consulted with Ms. Miller about it. I agree that it appropriately calculates the amount of long-term debt and the weighted cost of long-term debt with the adjustments described hereafter.

Q15. Please explain how the weighted cost of long-term debt is calculated in this exhibit?

A15. This exhibit calculates NIPSCO's weighted cost of long-term debt using NIPSCO's long-term debt as of December 31, 2007 adjusted to include $160 million of new debt issued on June 6, 2008 pursuant to the authority granted by the Commission in its Order dated February 6, 2008 in Cause No. 43370 and to exclude $24.0 million in NIPSCO Series C Medium Term Notes which matured in July 2008. The weighted cost of debt as so calculated is 6.56%.

Q16. Please describe the June 2008 debt issues.

A16. The June 2008 debt issues were in the form of two promissory notes issued to NFC: (a) a note in the amount of $80 million due June 6, 2018 at an interest rate of 6.09% and (b) a note in the amount of $80 million due June 6, 2023 at an interest rate of 6.525%. As discussed in my testimony in Cause No. 43370, this debt was issued to reduce short-term borrowings made to refinance a preferred stock redemption and to retire previously matured long-term debt. The new debt was also used to refinance NIPSCO's Series C Medium Term Notes which matured in July 2008.

Q17. How were debt discounts, debt expenses and call premiums on early redemption of long-term debt considered in the determination of NIPSCO's weighted cost of long-term debt?

A17. The annual amortization amounts are included as a debt cost. The unamortized balances are subtracted from the principal amount of outstanding debt, leaving a balance of $906,997,137. These amounts represent debt costs that need to be considered in the determination of NIPSCO's cost of capital. NIPSCO Witness Paul R. Moul will discuss this treatment in his direct testimony.

IV. OTHER DEBT ISSUES

Q18. Are there other recent or planned changes that affect NIPSCO's long-term debt costs?

A18. Yes. NIPSCO remarketed certain tax-exempt bonds on August 25, 2008 at new fixed interest rates. NIPSCO also intends to issue new long-term debt to finance part of the purchase price for the Sugar Creek Generating Station ("Sugar Creek Facility"). A petition for authority to engage in the debt financing for the Sugar Creek Facility was filed with the Commission on August 26, 2008.

Q19. Please describe the remarketing of tax-exempt debt.

A19. Between March 25, 2008 and April 11, 2008, NIPSCO repurchased $254 million of tax-exempt Jasper County Bonds that were temporarily being held within NIPSCO's own treasury. The repurchase was financed through $254.0 million of short-term borrowings from the NiSource Money Pool, an intra-system financing vehicle for short-term debt. This action was taken due to the recent severe market disruptions within the tax-exempt auction rate markets. At the same time these repurchases were completed, these securities were converted in accordance with their terms from an Auction Rate Mode to a Weekly Mode (Variable Rate Demand Obligation ("VRDO") segment of the tax-exempt market). As permitted by the terms of these securities, on August 25, 2008, NIPSCO converted these securities into a Fixed-Rate Mode and remarketed them to third-party external investors.

Q20. How does the remarketing of the tax-exempt debt affect NIPSCO's cost of debt?

A20. During the time in which the Jasper County Bonds were held within NIPSCO's treasury, the interest rate cost fluctuated based upon the Securities Industry and Financial Markets Association ("SIFMA") variable rate index. Prior to the remarketing, the interest cost for the Jasper County Bonds, based upon the SIMFA variable rate index, had fluctuated between 2.00% - 2.35%. When evaluating the possibility of remarketing the Jasper County Bonds, NIPSCO anticipated interest rates under a fixed-rate remarketing would range from 4.75% for the 2010 maturity to 6.00% for the 2019 maturity. NIPSCO also estimated the transaction costs associated with the remarketing would include approximately $650,000 in placement agent fees and approximately $200,000 in legal fees. Giving consideration to these debt costs, NIPSCO estimated the weighted average effective debt rate on the Jasper County Bonds would be approximately 5.80% after remarketing. In order to meet the August 29, 2008 deadline in this proceeding for the filing of NIPSCO's case-in-chief, these estimates were used in Petitioner's Exhibit LEM-5, page 3 of 3 to determine NIPSCO's weighted cost of long-term debt. The estimated rate for each individual maturity is separately shown on this exhibit. The estimated transaction costs are also shown on the exhibit as a debt expense.

Q21. If NIPSCO remarketed the Jasper County Bonds on August 25, 2008, why are estimated interest rates and transaction costs used in Petitioner's Exhibit LEM-5, page 3 of 3?

A21. Because the remarketing occurred only four days before NIPSCO's case-in-chief was to be filed, NIPSCO did not have time to revise its case-in-chief to incorporate the actual terms of the remarketed Jasper County Bonds. However, the use of the actual interest rates and transaction costs for the remarketed bonds would result in a weighted cost of debt that is not significantly different from the estimate shown in Petitioner's Exhibit LEM-5, page 3 of 3.

Q22. How do the actual debt costs associated with the August 25, 2008 remarketing compare to the estimates in Petitioner's Exhibit LEM-5, page 3 of 3?

A22. The actual interest rates were slightly lower than the projections and the placement agent's fees were higher resulting in an effective debt cost rate that is not significantly different. The difference in the interest rates are shown below:

Issue	Actual Interest Rate	Projected Interest Rate
Series 1988A	5.60%	5.75%
Series 1988B	5.60%	5.75%
Series 1988C	5.60%	5.75%
Series 1994A	4.15%	4.75%
Series 1994B	5.20%	5.25%
Series 1994C	5.85%	6.00%
Series 2003C	5.70%	5.875%
Weighted Average	5.58%	5.80%

Although the actual interest rates shown above are less than the projections, the actual placement agent's fees were $1,016,000 which is $366,000 greater than the projection. The net effect is an "all-in" effective debt cost rate that is not significantly different. Petitioner's Exhibit VVR-2, page 1 of 2, shows the calculation of the weighted cost of debt using the actual interest rates and placement agent's fees for the remarketed Jasper County Bonds. The result is a long-term debt amount of $906,631,137 and a weighted cost of debt of 6.52% which is only four basis points less than the 6.56% debt cost rate shown on Petitioner's Exhibit LEM-5, page 3 of 3.

Q23. Why did NIPSCO decide to remarket the Jasper County Bonds on a fixed-rate basis, which appears to be more expensive than a variable rate financing?

A23. A key advantage of publicly remarketing the Jasper County Bonds on a fixed-rate basis is that it eliminates the interest rate risk associated with a variable rate refinancing. While the SIFMA variable interest rate index for tax-exempt securities has most recently been fluctuating within the 2.00%-2.35% range, the index is highly correlated with overall changes in short-term interest rates, including changes in the London Interbank Offered Rate ("LIBOR") and the Federal Reserve Board's Federal Funds Rate. Due in large part to recent Federal Reserve Board actions which have reduced the Federal Funds target rate down to 2.00%, most short-term variable interest rates, including the SIFMA index, are currently near historical lows. Therefore, while there currently appeared to be an interest cost advantage to financing the Jasper County Bonds on a variable rate basis, there is a risk this cost advantage will be eliminated and even reversed, as interest rate cycles change direction over time and short-term interest rates trend upward. NIPSCO and its ratepayers would be exposed to this interest rate risk through April 1, 2019, the date at which the longest dated Jasper County Bond matures. Proceeding with a fixed-rate remarketing of the Jasper County Bonds eliminated this interest rate uncertainty going forward.

Another advantage of pursuing the fixed-rate remarketing is that a bank letter of credit ("LOC") will not be required to support the financing, which would be a requirement of a variable rate remarketing. Specifically, within the VRDO market, a direct pay LOC is required to provide additional credit support for the benefit of note holders, as well as providing a specific payment mechanism for the note holders to recover principal and interest payments in the event of a payment default by the obligors. Due to the recent turmoil in the credit markets resulting from the sub-prime mortgage crisis and general financial markets credit crisis, direct pay LOCs have become very expensive, as banks have "re-priced" the cost of bearing credit risk across the entire credit spectrum, including investment grade rated credits like NIPSCO. As a result, recent bank indications for a direct pay LOC to support a VRDO offering have been in the 1.25% to 1.50% range. This cost would be "over and above" the SIFMA variable interest rates discussed in the paragraph above. NIPSCO views these current LOC pricing levels as unacceptably high, and the general trend of LOC pricing is upward, meaning future LOC pricing could be even higher. This is especially problematic in light of the fact that the LOCs would need to be renewed by their issuing banks every one to three years, thereby exposing NIPSCO to even higher LOC costs through April 1, 2019. Furthermore, as banks continue to face increasing credit pressures and continue to be downgraded by the credit rating agencies, NIPSCO would also be facing the risk that the LOC banks would simply be unable to renew their LOCs at their expiration dates. Without sufficient access to a bank LOC, the VRDO securities would very likely need to be terminated and replaced with a fixed-rate offering, which, depending upon market circumstances at the time, may bear a fixed rate of interest considerably higher than today's fixed rates.

Q24. Please describe the proposed debt financing related to the acquisition of the Sugar Creek Facility.

A24. As discussed by NIPSCO Witness Bradley K. Sweet, the acquisition of the Sugar Creek Facility was closed on May 30, 2008 at a purchase price of $329,672,739. NIPSCO proposes to finance $120 million of the purchase price with long-term debt in the form of notes issued to NFC. The actual interest rate will depend on market conditions at the time the debt is issued. NIPSCO currently projects an interest rate of 6.50% for this new debt.

Q25. Please describe Petitioner's Exhibit LEM-9, page 3 of 3.

A25. Petitioner's Exhibit LEM-9, page 3 of 3, is the exhibit to Ms. Miller's direct testimony that shows the calculation of NIPSCO's weighted cost of long-term debt, adjusted to include the $120 million of additional long-term debt associated with the Sugar Creek Facility acquisition at the projected interest rate of 6.50%. I have reviewed this exhibit and concur that it appropriately calculates the amount of long-term debt and the weighted cost of long-term debt adjusting for the long-term debt used to finance the acquisition of the Sugar Creek Facility and using the estimated interest rates and transaction costs for the remarketed Jasper County Bonds discussed above. The result is a weighted cost of debt of 6.55% and a debt amount of $1,026,997,137. Petitioner's Exhibit VVR-2, page 2 of 2, shows the result of using the actual interest rates and placement agent's fees for the remarketed Jasper County Bonds is a weighted cost of debt of 6.52% and a debt amount of $1,026,631,137.

V. CONCLUSION

Q26. Does this conclude your prepared direct testimony?

A26. Yes, it does.

VERIFICATION

I, Vincent V. Rea, Director of Treasury and Corporate Finance for NiSource Inc., affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

Vincent V. Rea

Date: August 29, 2008

INDS01 DWM 1031731

Cost of Long-Term Debt
December 31, 2007 As Adjusted

Line No.	Rate	Description	Date of Issuance	Date of Maturity	Principal Amount	Interest Requirement	Cost Rate
	A	B	C	D	E	F	G
		Pollution Control (1)					
1	5.60%	Series 1988 Notes Series A	November 3, 1988	November 1, 2016	$ 37,000,000	$ 2,072,000	
2	5.60%	Series 1988 Notes Series B	November 3, 1988	November 1, 2016	$ 47,000,000	$ 2,632,000	
3	5.60%	Series 1988 Notes Series C	November 3, 1988	November 1, 2016	$ 46,000,000	$ 2,576,000	
4	4.15%	Series 1994 A Notes	August 25, 1994	August 1, 2010	$ 10,000,000	$ 415,000	
5	5.20%	Series 1994 B Notes	August 25, 1994	June 1, 2013	$ 18,000,000	$ 936,000	
6	5.85%	Series 1994 C Notes	August 25, 1994	April 1, 2019	$ 41,000,000	$ 2,398,500	
7	5.70%	Series 2003 C Notes	December 1, 2003	July 1, 2017	$ 55,000,000	$ 3,135,000	
8		**Intercompany Long-Term Debt**					
9	5.42%	Intercompany LT Note 5.42%	June 28, 2005	June 26, 2020	$ 137,500,000	$ 7,452,500	
10	5.21%	Intercompany LT Note 5.21%	June 28, 2005	June 27, 2015	$ 137,500,000	$ 7,163,750	
11	5.99%	Intercompany LT Note 5.985%	September 18, 2005	September 18, 2025	$ 75,000,000	$ 4,492,500	
12		**Medium-Term Notes**					
13	7.44%	Various Maturities			$ 165,200,000	$ 12,290,880	
14		**Long-Term Debt**					
15	6.09%	LT Note 6.09% - Refinancing	June 6, 2008	June 6, 2018	$ 80,000,000	$ 4,872,000	
16	6.525%	LT Note 6.525%- Refinancing	June 6, 2008	June 6, 2023	$ 80,000,000	$ 5,220,000	
17		**Total Long-Term Debt Per Balance Sheet**			$ 929,200,000	$ 55,656,130	
18		**Related Accounts:**					
19		Unamortized Debt Discount and Expense (2)			$ (6,988,844)	$ -	
20		Unamortized Call Premiums on Early Redemption of Long Term Debt			$ (15,580,019)	$ -	
21		Amortization of Debt Discount and Expense (3)			$ -	$ 758,303	
22		Amoritzation of Call Premiums on Early Redemption of Long Term Debt			$ -	$ 2,674,576	
23		**Total Long-Term Debt Used to Calculate Weighted Cost**			**$ 906,631,137**	**$ 59,089,009**	**6.52%**

24 (1) Projected rates from pending reoffering of Pollution Control Notes

25 (2) Increased the Unamortized Debt Discount and Expense by $ 1,216,000 for reoffering of Pollution Control Notes

26 (3) Increased Amortization of Debt Discount and Expense by $ 170,364 for reoffering of Pollution Control Notes

Long-Term Debt
Sugar Creek

Line No.	Rate (A)	Description	Date of Issuance	Date of Maturity	Principal Amount	Interest Requirement	Cost Rate
	A	B	C	D	E	F	G
1		**Pollution Control (1)**					
2	5.60%	Series 1988 Notes Series A	November 3, 1988	November 1, 2016	$ 37,000,000	$ 2,072,000	
3	5.60%	Series 1988 Notes Series B	November 3, 1988	November 1, 2016	$ 47,000,000	$ 2,632,000	
4	5.60%	Series 1988 Notes Series C	November 3, 1988	November 1, 2016	$ 46,000,000	$ 2,576,000	
5	4.15%	Series 1994 A Notes	August 25, 1994	August 1, 2010	$ 10,000,000	$ 415,000	
6	5.20%	Series 1994 B Notes	August 25, 1994	June 1, 2013	$ 18,000,000	$ 936,000	
7	5.85%	Series 1994 C Notes	August 25, 1994	April 1, 2019	$ 41,000,000	$ 2,398,500	
8	5.70%	Series 2003 C Notes	December 1, 2003	July 1, 2017	$ 55,000,000	$ 3,135,000	
9		**Intercompany Long-Term Debt**					
10	5.42%	Intercompany LT Note 5.42%	June 28, 2005	June 26, 2020	$ 137,500,000	$ 7,452,500	
11	5.21%	Intercompany LT Note 5.21%	June 28, 2005	June 27, 2015	$ 137,500,000	$ 7,163,750	
12	5.99%	Intercompany LT Note 5.985%	September 18, 2005	September 18, 2025	$ 75,000,000	$ 4,492,500	
13		**Medium-Term Notes**					
14	7.44%	Various Maturities			$ 165,200,000	$ 12,290,880	
15		**Long-Term Debt**					
16	6.50%	LT Note 6.50% - Sugar Creek Purchase	Pending	Pending	$ 120,000,000	$ 7,800,000	
17	6.09%	LT Note 6.09% - Refinancing	June 6, 2008	June 6, 2018	$ 80,000,000	$ 4,872,000	
18	6.525%	LT Note 6.525%- Refinancing	June 6, 2008	June 6, 2023	$ 80,000,000	$ 5,220,000	
19		**Total Long-Term Debt Per Balance Sheet**			$ 1,049,200,000	$ 63,456,130	
20		**Related Accounts:**					
21		Unamortized Debt Discount and Expense (2)			$ (6,988,844)	$ -	
22		Unamortized Call Premiums on Early Redemption of Long Term Debt			$ (15,580,019)	$ -	
23		Amortization of Debt Discount and Expense (3)			$ -	$ 758,303	
24		Amortization of Call Premiums on Early Redemption of Long Term Debt			$ -	$ 2,674,576	
25		**Total Long-Term Debt Used to Calculate Weighted Cost**			**$ 1,026,631,137**	**$ 66,889,009**	**6.52%**
26		(1) Projected rates from pending reoffering of Pollution Control Notes					
27		(2) Increased the Unamortized Debt Discount and Expense by $ 1,216,000 for reoffering of Pollution Control Notes					
28		(3) Increased Amortization of Debt Discount and Expense by $ 170,364 for reoffering of Pollution Control Notes					

Moul

Petitioner's Exhibit PRM-1

NORTHERN INDIANA PUBLIC SERVICE COMPANY

IURC CAUSE NO. 43526

DIRECT TESTIMONY

OF

PAUL R. MOUL

MANAGING CONSULTANT

SPONSORING PETITIONER'S EXHBIIT PRM-2

NORTHERN INDIANA PUBLIC SERVICE COMPANY

Direct Testimony of Paul R. Moul

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GLOSSARY OF ACRONYMS AND DEFINED TERMS	
ACRONYM	**DEFINED TERM**
AFUDC	Allowance for Funds Used During Construction
β	Beta
b	Represents the retention rate that consists of the fraction of earnings that are not paid out as dividends
b x r	Represents internal growth
CAPM	Capital Asset Pricing Model
CCR	Corporate Credit Rating
DCF	Discounted Cash Flow
EIA	Energy Information Administration
EPACT	National Energy Policy Act
FERC	Federal Energy Regulatory Commission
FFO	Funds from Operations
FOMC	Federal Open Market Committee
g	Growth rate
GDP	Gross Domestic Product
IGF	Internally Generated Funds
IURC	Indiana Utility Regulatory Commission
Lev	Leverage modification
LT	Long Term
Midwest ISO	Midwest Independent Transmission System Operators, Inc.
MLP	Master Limited Partnerships
MM	Modigliani and Miller

GLOSSARY OF ACRONYMS AND DEFINED TERMS

ACRONYM	DEFINED TERM
NUGS	Non-utility Generators
OCI	Other Comprehensive Income
PUC	Public Utility Commission
r	Represents the expected rate of return on common equity
Rf	Risk-free rate of return
Rm	Market risk premium
RTOs	Regional Transmission Organizations
s	Represents the new common shares expected to be issued by a firm
s x v	Represents external growth
S&P	Standard & Poor's
v	Represents the value that accrues to existing shareholders from selling stock at a price different from book value

VERIFIED DIRECT TESTIMONY OF PAUL R. MOUL

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

Q1. Please state your name, occupation and business address.

A1. My name is Paul Ronald Moul. My business address is 251 Hopkins Road, Haddonfield, New Jersey 08033-3062. I am Managing Consultant of the firm P. Moul & Associates, an independent financial and regulatory consulting firm. My educational background, business experience and qualifications are provided in Appendix A, which follows my direct testimony.

Q2. What is the purpose of your testimony?

A2. My testimony presents evidence, analysis, and a recommendation concerning the appropriate rate of return on common equity that the Indiana Utility Regulatory Commission ("IURC" or the "Commission") should recognize in the determination of the revenues that Northern Indiana Public Service Company ("NIPSCO" or the "Company") should realize as a result of this proceeding. I will also address the fair rate of return applicable to the Company's fair value rate base. My analysis and recommendation are supported by the detailed financial data contained in Petitioner's Exhibit PRM-2, which is a multi-page document prepared by me that is divided into twelve (12) schedules. Additional evidence, in the form of appendices, follows my prepared direct testimony. The items covered in these appendices provide additional detailed information concerning the explanation and application of the various financial models upon which I rely.

Q3. Based upon your analysis, what is your conclusion concerning the appropriate rate of return on common equity for the Company in this case?

A3. My conclusion is that the appropriate rate of return on common equity for the Company in this case is 12.00%. The resulting overall cost of capital that the Company has proposed is the product of weighting the individual capital costs, which includes my proposed cost of equity, by the proportion of each respective type of capital. That return should provide a just and reasonable level of return for the use of capital and provide the Company with the ability to attract capital on reasonable terms. Schedule 1 also provides calculations that include capital from non-investor provided sources typically used in the ratesetting process by the IURC. Details of the Company's proposed cost of debt capital and weighted average cost of capital is contained in the testimony of NIPSCO Witness Linda E. Miller, the Company's Executive Director, Rates and Regulatory Finance.

Q4. What background information have you considered in reaching a conclusion concerning the Company's cost of capital?

A4. The Company is wholly-owned subsidiary of NiSource Inc. ("NiSource"), and is part of a natural gas and electric utility holding company structure. NiSource was formerly known as NIPSCO Industries, INC., and acquired Columbia Energy Group in 2001. NiSource is a holding company subject to the Public Utility Holding Company Act of 2005 ("PUHCA") and also owns Columbia Energy Group, Bay State Gas Company and its subsidiary Northern Utilities, Inc, and other energy investments. NiSource is in the process of disposing of the Northern Utilities.

The Company provides both electric and natural gas distribution utility service. The Company distributes natural gas to approximately 720,000 customers located in northern Indiana. The Company's electric operations consist of generation, transmission and delivery of electricity to about 457,000 customers. Electric sales in 2007 by customer class were approximately 20% to residential customers, 21% to commercial customers, 53% to industrial customers, and 1% to street lighting, public authorities, railroads and interdepartmental customers, and 5% to resale customers. The Company obtains its energy from its own resources (about 78% in 2007) and from purchases and net exchanges (about 22% in 2007). Of its own resources, the majority is obtained from coal-fired generation, with the remainder provided by natural gas fired and hydroelectric generation. In order to meet its generation needs, the Company has recently purchased the 535 MW combined cycle gas turbine Sugar Creek generating station.

Q5. How have you determined the cost of common equity in this case?

A5. The cost of common equity is established using capital market and financial data relied upon by investors to assess the relative risk, and hence the cost of equity, for an electric and gas utility, such as NIPSCO. In this regard, I have considered four (4) well-recognized measures of the cost of equity: the Discounted Cash Flow ("DCF") model, the Risk Premium ("RP") analysis, the Capital Asset Pricing Model ("CAPM"), and the Comparable Earnings ("CE") approach.

Q6. What factors should the Commission consider when setting the Company's cost of capital in this proceeding?

A6. The end result of the Commission's rate of return allowance must provide the Company with an opportunity to cover its interest and dividend payments, provide a reasonable level of earnings retention, produce an adequate level of internally generated funds to meet capital requirements, be adequate to attract capital, be commensurate with the risk to which the Company's capital is exposed, and support reasonable credit quality.

Q7. What factors have you considered in measuring the cost of equity for this case?

A7. The models that I used to measure the cost of common equity for the Company were applied with market and financial data developed from a proxy group of thirteen utility companies. The proxy group consists of publicly-traded companies that are included in The Value Line Investment Survey, whose electric utility subsidiaries (a) are transmission owning members of the Midwest Independent Transmission System Operator ("Midwest ISO"), or were former owners of transmission assets that were transferred to either American Transmission Company or International Transmission Company, (b) have not recently reduced their common dividend, and (c) are not currently the target of a merger or acquisition. These criteria make sense because they provide a common set of characteristics that represent the risk traits of NIPSCO, if its stock were publicly-traded. Indeed, these characteristics are also representative of NiSource, which is a component of the Electric Group. The companies in the proxy group are identified on page 2 of Schedule 3 of Petitioner's Exhibit PRM-2. I will refer to these companies as the "Electric Group" throughout my testimony.

Q8. How have you performed your cost of equity analysis with the market data for the Electric Group?

A8. I have applied the models/methods for estimating the cost of equity using the average data for the Electric Group. I have not measured separately the cost of equity for the individual companies within the Electric Group, because the determination of the cost of equity for an individual company is problematic. The use of a group average (or portfolio) of electric utilities will reduce the effect that anomalous results for an individual company may have on the rate of return determination. This is to say, by employing group average data, rather than individual companies' analysis, I have helped to minimize the effect of extraneous influences on the market data for an individual company.

Q9. Please summarize your cost of equity analysis.

A9. My cost of equity determination was derived from the results of the methods/models identified above. In general, the use of more than one method provides a superior foundation to arrive at the cost of equity. At any point in time, any single method can provide an incomplete measure of the cost of equity depending upon extraneous factors that may influence market sentiment. The specific application of these methods/models will be described later in my testimony. The following table provides a summary of the indicated costs of equity using each of these approaches.

	Electric Group
DCF	11.21%
Risk Premium	11.67%
CAPM	12.76%
Comparable Earnings	15.70%
Average	12.84%
Median	12.22%
Mid-point	13.46%

Focusing upon the market model approaches of the cost of equity (*i.e.*, DCF, Risk Premium and CAPM), the average equity return produced is 11.88% (11.21% + 11.67% + 12.76% = 35.64% ÷ 3). The average of the DCF and CAPM results is 11.99% (11.21% + 12.76% = 23.97%÷ 2). From all these measures, I recommend that the Commission set the Company's rate of return on common equity at 12.00% to calculate its weighted average cost of capital. The specific factors that uniquely impact the Company's risk profile will be described in the following section of my testimony, and the pre-filed direct testimony of NIPSCO Witness Eileen O'Neill Odum. My proposed cost of equity of 12.00% makes no provision for the prospect that the rate of return may not be achieved due to unforeseen events such as unexpected spikes in the cost of purchased products and other expenses, abrupt changes in customer usage, and abnormal weather events.

II. <u>ELECTRIC UTILITY RISK FACTORS</u>

Q10. Please discuss the evolving risk issues for electric utilities.

A10. Under the rules of FERC Order No. 2000, RTOs have been formed as independent entities that offer non-discriminatory transmission service. The Company is part of Midwest ISO, a FERC-recognized RTO. The passage of the Energy Policy Act of 2005 also highlights the emphasis being placed upon the reliability and structure of the electric utility industry. Aside from their traditional responsibility to supply adequate capacity to meet forecast loads amid growing uncertainties due to global warming and conservation, some electric utilities, including the Company, face substantial increases in operating and capital costs to comply with increasingly stringent emission controls under the Clean Air Act ("CAA"). Compliance with any future regulation of "greenhouse gases" would add to these costs. These investments do not add to an electric utility's generating capacity, but rather they represent cost increases that create added risk for the electric utilities. Environmental risk becomes aggravated by the recurring series of new laws and regulations. The "moving target" nature of environmental regulations pressures the operations and rate structures of electric utilities. Investors will continue monitoring the regulatory support provided for the large capital requirements associated with environmental compliance, such as currently exists in Indiana.

Q11. Are there specific risk factors influencing the Company's risk profile?

A11. Yes. Its risk profile is strongly influenced by electricity sold to industrial customer sales. Sales to industrial customers represent approximately 53% of total kilowatt sales by the Company, but these customers represent less than one percent of total NIPSCO electric customers. According to the Energy Information Administration ("EIA"), industrial sales typically represent approximately 27% of total sales. For NIPSCO, its industrial sales percentage far exceeds the EIA percentage, which indicates that the Company has significantly higher risk. Steel-related industries represent approximately 64% of total industrial sales. The steel industry faces a number of challenges including international competition, increased costs, and fluctuating demand for its products. In addition, the Company's sales profile is also a factor considered in the credit rating process. In fact, Standard & Poor's has noted: "Indiana has the highest level of industrial employment of any state, with 20.7% of its workforce in industrial jobs. Northern Indiana has a high concentration of steel factories, chemical, metals, auto parts, and refining as major activities." Industrial sales are generally higher in risk than sales to other classes of customers. Success in this segment of the Company's market is subject to (i) the business cycle, (ii) the price of alternative energy sources, and (iii) pressures from alternative providers. Moreover, external factors can also influence the Company's sales to these customers which face competitive pressures on their own operations from other facilities outside the Company's service territories. Industrial sales are also prone to significant charge-offs for uncollectible revenues, which have totaled nearly $10 million since 1999.

Q12. Please indicate how the Company's risk profile is affected by its construction program.

A12. NIPSCO is faced with the requirement to undertake investment to maintain and upgrade existing facilities in its service territory, including expenditures to maintain system reliability and to meet customer and load growth. Over the period from 2008-2012, NIPSCO's total company capital expenditures are expected to total approximately $1.603

billion, which is comprised of $1.381 billion for electric and $0.222 billion for natural gas. These expenditures will represent 45% ($1.603 billion ÷ $3.542 billion) of the Company's net utility plant (both electric and natural gas based on the Company's reported financial statements) at December 31, 2007. As previously noted, a fair rate of return for the Company is key to a financial profile that will provide the Company with the ability to raise the capital necessary to meet its capital needs on an ongoing basis. In the situation where significant amounts of additional capital are required, as shown by the construction expenditures indicated above, the regulatory process must establish a return on equity that provides a reasonable opportunity for the Company to obtain capital from the financial markets at reasonable costs and to earn its cost of capital.

Q13. Is your recommended cost of equity consistent with the proposal submitted by the Company in this case for a tracking mechanism that would adjust rates (a) for certain RTO revenues, credits and costs, (b) for certain purchased power costs, and (c) to pass-through off system sales margins to retail customers?

A13. Yes. My proposed cost of equity of 12.00% will accommodate the Company's proposal. This proposal is designed to deal with evolving issues facing the Company in this segment of the Company's business. Absent the Commission's approval of this proposal by the Company, the Company's risk will be elevated to the point where a return higher than my recommendation would be necessary to accommodate these risk factors.

Q14. Is your recommendation also consistent with the environmental trackers that are currently available to the Company?

A14. Yes. The trackers, which were implemented in recent years, have been necessary mechanisms in order for NIPSCO to raise the significant amounts of capital necessary to meet its environmental obligations. The Commission and Indiana legislature have been supportive in this regard. Investors are aware of the regulatory support provided by the environmental trackers, and have incorporated it in the assessment of the risks for NIPSCO. It is important that this support is continued, so that the financial profile of NIPSCO is not impaired. It would be counterproductive to make adjustments to the Company's return in a rate case for the availability of these mechanisms, because that approach would undo the benefits available under the environmental trackers. The consequences of any adjustment in the return would serve ultimately to increase the Company's risk and thus its cost of capital.

III. <u>FUNDAMENTAL RISK ANALYSIS</u>

Q15. Is it necessary to conduct a fundamental risk analysis to provide a framework for a determination of a utility's cost of equity?

A15. Yes. It is necessary to establish a company's relative risk position within its industry through a fundamental analysis of various quantitative and qualitative factors that bear upon investors' assessment of overall risk. The qualitative factors that bear upon the Company's risk have already been discussed. The quantitative risk analysis follows. The items that influence investors' evaluation of risk and their required returns are described in Appendix B. For this purpose, I compared NIPSCO to the S&P Public Utilities, an industry-wide proxy consisting of various regulated businesses, and to the Electric Group.

Q16. What are the components of the S&P Public Utilities?

A16. The S&P Public Utilities is a widely recognized index that is comprised of electric power and natural gas companies. These companies are identified on page 3 of Schedule 4.

Q17. What criteria did you employ to assemble the Electric Group?

A17. I previously enumerated the criteria that I employed to assemble the Electric Group.

Q18. Is knowledge of a utility's bond rating an important factor in assessing its risk and cost of capital?

A18. Yes. Knowledge of a company's credit quality rating is important because the cost of each type of capital is directly related to the associated risk of the firm. So while a company's credit quality risk is shown directly by the rating and yield on its bonds, these relative risk assessments also bear upon the cost of equity. This is because a firm's cost of equity is represented by its borrowing cost plus compensation to recognize the higher risk of an equity investment compared to debt.

Q19. How do the bond ratings compare for NIPSCO, the Electric Group, and the S&P Public Utilities?

A19. Presently, the corporate credit rating ("CCR") for NIPSCO is BBB- from Standard and Poor's Corporation ("S&P"), and the Long Term ("LT") issuer rating is Baa2 from Moody's Investors Service ("Moody's"). The S&P rating for NIPSCO and NiSource was downgraded on December 18, 2007. The S&P rating for NiSource is at the bottom of the investment grades. The CCR designation by S&P and LT issuer rating by Moody's focuses upon the credit quality of the issuer of the debt, rather than upon the debt obligation itself. The average credit quality of the Electric Group is a BBB+ from S&P and A3 from Moody's. For the S&P Public Utilities, the average composite rating is BBB+ by S&P and Baa1 by Moody's. Many of the financial indicators that I will subsequently discuss are considered during the rating process.

Q20. How do the financial data compare for NIPSCO, the Electric Group, and the S&P Public Utilities?

A20. The broad categories of financial data that I will discuss are shown on Schedules 2, 3, and 4. The important categories of relative risk may be summarized as follows:

Size. In terms of capitalization, NIPSCO is approximately one-fifth the average size of the Electric Group, and smaller than the average size of the S&P Public Utilities. All other things being equal, a smaller company is riskier than a larger company because a given change in revenue and expense has a proportionately greater impact on a small firm.

Market Ratios. Market-based financial ratios, such as earnings/price ratios and dividend yields, provide a partial measure of the investor-required cost of equity. If all other factors are equal, investors will require a higher rate of return for companies that exhibit greater risk, in order to compensate for that risk. That is to say, a firm that investors perceive to have higher risks will experience a lower price per share in relation to expected earnings.[1]

There are no market ratios available for NIPSCO because NiSource owns its stock. The five-year average price-earnings multiple for the Electric Group was somewhat higher than that of the S&P Public Utilities. The five-year average dividend yields were also somewhat higher for the Electric Group as compared to the S&P Public Utilities. The average market-to-book ratios were lower for the Electric Group compared to the S&P Public Utilities.

Common Equity Ratio. The level of financial risk is measured by the proportion of long-term debt and other senior capital that is contained in a company's capitalization. Financial risk is also analyzed by comparing common equity ratios (the complement of the ratio of debt and other senior capital). That is to say, a firm with a high common equity ratio has lower financial risk, while a firm with a low common equity ratio has higher financial risk. I also have removed the accumulated other comprehensive income ("OCI") from the common equity account and capital structure for my analysis. OCI arises from a variety of sources, including: minimum pension liability, foreign currency hedges, unrealized gains and losses on securities available for sale, interest rate swaps, and other cash flow hedges. For NIPSCO, its OCI is represented by other cash flow hedges. These accounting entries to accumulated OCI are unrelated to the Company's rate base determination and must be excluded from the common equity. That is to say,

[1]For example, two otherwise similarly situated firms each reporting $1.00 in earnings per share would have different market prices at varying levels of risk (i.e., the firm with a higher level of risk will have a lower share value, while the firm with a lower risk profile will have a higher share value).

these accounting entries neither produce nor consume cash, and hence they cannot impact the rate base valuation. The five-year average common equity ratios, based on permanent capital, were 61.7% for NIPSCO, 47.1% for the Electric Group, and 43.5% for the S&P Public Utilities.

Return on Book Equity. Greater variability (*i.e.*, uncertainty) of a firm's earned returns signifies relatively greater levels of risk, as shown by the coefficient of variation (standard deviation ÷ mean) of the rate of return on book common equity. The higher the coefficients of variation, the greater degree of variability. For the five-year period, the coefficients of variation were 0.147 (1.9% ÷ 12.9%) for NIPSCO, 0.062 (0.6% ÷ 9.7%) for the Electric Group, and 0.055 (0.7% ÷ 12.8%) for the S&P Public Utilities.

Operating Ratios. I have also compared operating ratios (the percentage of revenues consumed by operating expense, depreciation, and taxes other than income).[2] The five-year average operating ratios were 85.4% for NIPSCO, 86.7% for the Electric Group, and 84.4% for the S&P Public Utilities.

Coverage. The level of fixed charge coverage (*i.e.*, the multiple by which available earnings cover fixed charges, such as interest expense) provides an indication of the earnings protection for creditors. Higher levels of coverage, and hence earnings protection for fixed charges, are usually associated with superior grades of creditworthiness. The five-year average interest coverage (excluding Allowance for

[2]The complement of the operating ratio is the operating margin which provides a measure of profitability. The higher the operating ratio, the lower the operating margin.

Funds Used During Construction ("AFUDC")) was 6.54 times for NIPSCO, 2.91 times for the Electric Group, and 3.11 times for the S&P Public Utilities.

Quality of Earnings. Measures of earnings quality usually are revealed by the percentage of AFUDC related to income available for common equity, the effective income tax rate, and other cost deferrals. These measures of earnings quality usually influence a firm's internally generated funds because poor quality of earnings would not generate high levels of cash flow. Quality of earnings has not been a significant concern for NIPSCO, the Electric Group, and the S&P Public Utilities.

Internally Generated Funds. Internally generated funds ("IGF") provide an important source of new investment capital for a utility and represent a key measure of credit strength. Historically, the five-year average percentage of IGF to capital expenditures was 135.3% for NIPSCO, 93.4% for the Electric Group, and 106.5% for the S&P Public Utilities. As noted previously, the Company's capital expenditures are expected to increase from historical levels. So while capital expenditures in total were approximately $1.132 billion during the past five years, they are expected to increase to $1.603 billion for the next five years.

Betas. The financial data that I have been discussing relate primarily to company-specific risks. Market risk for firms with publicly-traded stock is measured by beta coefficients. Beta coefficients attempt to identify systematic risk, *i.e.*, the risk associated with changes in the overall market for common equities.[3] Value Line publishes such a statistical measure of a stock's relative historical volatility to the rest of the market. A comparison of market risk is shown by the Value Line beta of .85 as the average for the Electric Group (see page 2 of Schedule 3), and .89 as the average for the S&P Public Utilities (see page 3 of Schedule 4).

Q21. Please summarize your risk evaluation.

A21. The risk of NIPSCO parallels that of the Electric Group in certain respects. On some counts the Company's risk is higher, such as its smaller size and its higher earnings variability. The credit quality of NIPSCO is also weaker than the Electric Group. For other measures, the Company's risk is lower, such as its higher common equity ratio, its higher interest coverage, and its higher IGF to construction. Other measures are approximately equal, *i.e.*, operating ratios and quality of earnings. On balance, the risk factors average out, indicating that some risk factors are higher, some are lower, and others are about the same, which indicate that the cost of equity for the Electric Group provides a reasonable basis for measuring the Company's cost of equity for this case.

IV. COST OF EQUITY – GENERAL APPROACH

Q22. Please describe the process you employed to determine the cost of equity for the Company.

[3]The procedure used to calculate the beta coefficient published by Value Line is described in Appendix I. A common stock that has a beta less than 1.0 is considered to have less systematic risk than the market as a whole and would be expected to rise and fall more slowly than the rest of the market. A stock with a beta above 1.0 would have more systematic risk.

A22. Although my fundamental financial analysis provides the required framework to establish the risk relationships between NIPSCO, the Electric Group and the S&P Public Utilities, the cost of equity must be measured by standard financial models that I describe in Appendix C. Differences in risk traits, such as size, business diversification, geographical diversity, regulatory policy, financial leverage, and bond ratings must be considered when analyzing the cost of equity indicated by the models.

It also is important to reiterate that no one method or model of the cost of equity can be applied in an isolated manner. As noted in Appendix C, and elsewhere in my direct testimony, each of the methods used to measure the cost of equity contains certain incomplete and/or overly restrictive assumptions and constraints that are not optimal. Therefore, I favor considering the results from a variety of methods. In this regard, I applied each of the methods with data taken from the Electric Group and have arrived at a cost of equity of 12.00% for NIPSCO.

V. <u>DISCOUNTED CASH FLOW ANALYSIS</u>

Q23. Please describe your use of the Discounted Cash Flow approach to determine the cost of equity.

A23. The details of my use of the DCF approach and the calculations and evidence in support of my conclusions are set forth in Appendix D. I will summarize them here. The DCF model seeks to explain the value of an asset as the present value of future expected cash flows discounted at the appropriate risk-adjusted rate of return. In its simplest form, the

DCF return on common stocks consists of a current cash (dividend) yield and future price appreciation (growth) of the investment.

Among other limitations of the model, there is a certain element of circularity in the DCF method when applied in rate cases. This is because investors' expectations for the future depend upon regulatory decisions. In turn, when regulators depend upon the DCF model to set the cost of equity, they rely upon investor expectations that include an assessment of how regulators will decide rate cases. Due to this circularity, the DCF model may not fully reflect the true risk of a utility.

As I describe in Appendix D, the DCF approach has other limitations that diminish its usefulness in the ratesetting process where, as in this case, the firm's market capitalization diverges significantly from the book value capitalization. When this situation exists, the DCF method will lead to a misspecified cost of equity when it is applied to a book value capital structure.

Q24. Please explain the dividend yield component of a DCF analysis.

A24. The DCF methodology requires the use of an expected dividend yield to establish the investor-required cost of equity. For the twelve months ended May 2008, the monthly dividend yields of the Electric Group are shown graphically on Schedule 5. The monthly dividend yields shown on Schedule 5 reflect an adjustment to the month-end prices to reflect the build up of the dividend in the price that has occurred since the last ex-dividend date (*i.e.*, the date by which a shareholder must own the shares to be entitled to the dividend payment – usually about two to three weeks prior to the actual payment). An explanation of this adjustment is provided in Appendix D.

For the twelve months ending May 2008, the average dividend yield was 4.23% for the Electric Group based upon a calculation using annualized dividend payments and adjusted month-end stock prices. The dividend yields for the more recent six- and three-month periods were 4.39% and 4.44%, respectively. I have used, for the purpose of my direct testimony, a dividend yield of 4.39% for the Electric Group, which represents the six-month average yield. The use of this dividend yield will reflect current capital costs, while avoiding spot yields.

For the purpose of a DCF calculation, the average dividend yields must be adjusted to reflect the prospective nature of the dividend payments *i.e.*, the higher expected dividends for the future. Recall that the DCF is an expectational model that must reflect investor anticipated cash flows for the Electric Group. I have adjusted the six-month average dividend yield in three different, but generally accepted manners, and used the average of the three adjusted values as calculated in Appendix D. That adjusted dividend yield is 4.54% for the Electric Group.

Q25. Please explain the underlying factors that influence investor's growth expectations.

A25. As noted previously, investors are interested principally in the future growth of its investment (*i.e.*, the price per share of the stock). As I explain in Appendix D, future earnings per share growth represents the primary focus because under the constant price-earnings multiple assumption of the DCF model, the price per share of stock will grow at the same rate as earnings per share. In conducting a growth rate analysis, a wide variety of variables can be considered when reaching a consensus of prospective growth. The variables that can be considered include: earnings, dividends, book value, and cash flow stated on a per share basis. Historical values for these variables can be considered, as well as analysts' forecasts that are widely available to investors. A fundamental growth rate analysis also can be formulated, which consists of internal growth ("b x r"), where "r" represents the expected rate of return on common equity and "b" is the retention rate that consists of the fraction of earnings that are not paid out as dividends. The internal growth rate can be modified to account for sales of new common stock -- this is called external growth ("s x v"), where "s" represents the new common shares expected to be issued by a firm and "v" represents the value that accrues to existing shareholders from selling stock at a price different from book value. Fundamental growth, which combines internal and external growth, provides an explanation of the factors that cause book value per share to grow over time. Hence, a fundamental growth rate analysis is duplicative of expected book value per share growth.

Growth also can be expressed in multiple stages. This expression of growth consists of an initial "growth" stage where a firm enjoys rapidly expanding markets, high profit margins, and abnormally high growth in earnings per share. Thereafter, a firm enters a "transition" stage where fewer technological advances and increased product saturation begin to reduce the growth rate and profit margins come under pressure. During the "transition" phase, investment opportunities begin to mature, capital requirements decline, and a firm begins to pay out a larger percentage of earnings to shareholders.

Finally, the mature or "steady-state" stage is reached when a firm's earnings growth, payout ratio, and return on equity stabilizes at levels where they remain for the life of a firm. The three stages of growth assume a step-down of high initial growth to lower sustainable growth. Even if these three stages of growth can be envisioned for a firm, the third "steady-state" growth stage, which is assumed to remain fixed in perpetuity, represents an unrealistic expectation because the three stages of growth can be repeated. That is to say, the stages can be repeated where growth for a firm ramps-up and ramps-down in cycles over time.

Q26. What investor-expected growth rate is appropriate in a DCF calculation?

A26. Investors consider both company-specific variables and overall market sentiment (*i.e.*, level of inflation rates, interest rates, economic conditions, etc.) when balancing its capital gains expectations with the dividend yield requirements. I follow an approach that is not rigidly formatted because investors are not influenced by a single set of company-specific variables weighted in a formulaic manner. Therefore, in my opinion, all relevant growth rate indicators using a variety of techniques must be evaluated when formulating a judgment of investor expected growth.

Q27. What company-specific data have you considered in your growth rate analysis?

A27. I have considered the growth in the financial variables shown on Schedule 6 and Schedule 7. The bar graph provided on Schedule 6 shows the historical growth rates in earnings per share, dividends per share, book value per share, and cash flow per share for the Electric Group. The historical growth rates were taken from the Value Line publication that provides these data. As shown on Schedule 6, historical growth was virtually non-existent for the Electric Group. In the situation where no values are shown on Schedule 6, the group averages had negative growth rates. Indeed, for the financial variables (*i.e.*, earnings per share, dividends per share and cash flow per share) where no values are shown on the bar graph, the historical group average growth rate was negative. Negative growth rates, which dominate the historical data, provide no reliable guide to gauge investor expected growth for the future. Investor expectations encompass long-term positive growth rates and, as such, could not be represented by sustainable negative rates of change. Therefore, statistics that include negative growth rates should not be given any weight when formulating a composite growth rate expectation. The prospect of rate increases granted by regulators, the continuing obligation to provide safe, adequate and proper service to customers, and the ongoing growth of customers mandate investor expectations of positive future growth rates. Stated simply, there is no reason for investors to expect that a utility will wind up its business and distribute net assets to shareholders, which would be symptomatic of a long-term permanent earnings decline. Although investors have knowledge that negative growth and losses can occur, their expectations include positive growth. Indeed, rational investors expect positive returns; otherwise they would hold cash rather than invest with the expectation of a loss. Hence, negative historic values will not provide a reasonable representation of future growth expectations because, in the long run, investors will always expect positive growth.

This is all confirmed by the fact that analysts forecast growth for the Electric Group despite its lack of historical growth. Schedule 7 provides projected earnings per share growth rates taken from analysts' forecasts compiled by IBES/First Call and Zacks and from the Value Line publication. IBES/First Call and Zacks represent reliable authorities of projected growth upon which investors rely. The IBES/First Call and Zacks forecasts are limited to earnings per share growth, while Value Line makes projections of other financial variables. The Value Line forecasts of dividends per share, book value per share, and cash flow per share have also been included on Schedule 7 for the Electric Group.

Although five-year forecasts usually receive the most attention in the growth analysis for DCF purposes, present market performance has been strongly influenced by short-term earnings forecasts. Each of the major publications provides earnings forecasts for the current and subsequent year. These short-term earnings forecasts receive prominent coverage, and indeed they dominate these publications.

Q28. Is a five-year investment horizon associated with the analysts' forecasts consistent with the DCF model?

A28. Yes. In fact, it illustrates that the infinite form of the model contains an unrealistic assumption. Rather than viewing the DCF in the context of an endless stream of growing dividends (*e.g.*, a century of cash flows), the growth in the share value (*i.e.*, capital appreciation, or capital gains yield) is most relevant to investors' total return expectations. Hence, the sale price of a stock can be viewed as a liquidating dividend that can be discounted along with the annual dividend receipts during the investment-holding period to arrive at the investor expected return. The growth in the price per share will equal the growth in earnings per share absent any change in price-earnings (P-E) multiple -- a necessary assumption of the DCF. My proxy group growth analysis focuses principally upon analysts' five-year forecasts of earnings per share growth, and conforms with the type of analysis that influences the total return expectation of investors. Moreover, academic research focuses on five-year growth rates as they influence stock prices. Indeed, if investors really required forecasts which extended beyond five years in order to properly value common stocks, then I am sure that some investment advisory service would begin publishing that information for individual stocks in order to meet the demands of investors. The absence of such a publication signals that investors do not require infinite forecasts in order to purchase and sell stocks in the marketplace.

Q29. What specific evidence have you considered in the DCF growth analysis?

A29. As to the five-year forecast growth rates, Schedule 7 indicates that the projected earnings per share growth rates for the Electric Group are 6.79% by IBES/First Call, 6.45% by Zacks, and 6.54% by Value Line. The Value Line projections indicate that earnings per share for the Electric Group will grow prospectively at a more rapid rate (*i.e.*, 6.54%) than the dividends per share (*i.e.*, 4.23%), which indicates a declining dividend payout ratio for the future. As indicated earlier, and in Appendix D, with the constant price-earnings multiple assumption of the DCF model, growth for these companies will occur at the higher earnings per share growth rate, thus producing the capital gains yield expected by investors.

Q30. What conclusion have you drawn from these data regarding the applicable growth rate to be used in the DCF model?

A30. Ideally historical and projected earnings per share and dividends per share growth indicators would be used to provide an assessment of investor growth expectations for a firm; however, the circumstances of the Electric Group mandate that the greater emphasis be placed upon projected earnings per share growth. Projections of future earnings growth provide the principal focus of investor expectations. In this regard, it is worthwhile to note that Professor Myron Gordon, the foremost proponent of the DCF model in rate cases, concluded that the best measure of growth in the DCF model is forecasts of earnings per share growth.[4] Hence, to follow Professor Gordon's findings, projections of earnings per share growth, such as those published by IBES/First Call, Zacks, and Value Line, represent a reasonable assessment of investor expectations.

It is appropriate to consider all forecasts of earnings growth rates that are available to investors. In this regard, I have considered the forecasts from IBES/First Call, Zacks, and Value Line. The IBES/First Call and Zacks growth rates are consensus forecasts taken from a survey of analysts that make projections of growth for these companies. The IBES/First Call and Zacks estimates are obtained from the Internet and are widely available to investors free-of-charge. First Call is probably quoted most frequently in the financial press when reporting on earnings forecasts. The Value Line forecasts are also widely available to investors and can be obtained by subscription or free-of-charge at most public and collegiate libraries.

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[4] "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management, spring 1989 by Gordon, Gordon & Gould.

With the repeal of the 1935 Public Utility Holding Company Act ("PUHCA"), merger and acquisition ("M&A") activity, which already has been prevalent in the utility industry, is expected to continue. Acquisitions are usually accomplished at premiums offered to induce stockholders to sell its shares. These premiums create a ripple effect on the stock prices of all utilities, just like a rising tide lifts all boats. Due to M&A activity, there has been a run-up of the stock prices for some utility companies. With these elevated stock prices, dividend yields fall, and without some adjustment to the growth component of the DCF model, the results become unduly depressed by reference to alternative investment opportunities – such as public utility bonds. There are three remedies available to deal with these potentially anomalous DCF results: (i) an adjustment to the DCF model to reflect the divergence of market capitalization and the book value capitalization, (ii) the use of a growth component in the DCF model which is at the high end of the range, and (iii) supplementing the DCF results with other measures of the cost of equity.

The forecasts of earnings per share growth, as shown on Schedule 7, provide a range of growth rates of 6.45% to 6.79%. Although the DCF growth rates cannot be established solely with a mathematical formulation, it is my opinion that an investor-expected growth rate of 6.50% is within the array of growth rates shown by the analysts' forecasts of earnings growth. The <u>Value Line</u> forecast of dividend per share growth is inadequate in this regard due to the forecast decline in the dividend payout that I previously described. As I previously indicated, the restructuring and consolidation now taking place in the utility industry will provide additional risks and opportunities as the utility industry successfully adapts to the new business environment. These changes in growth fundamentals will undoubtedly develop beyond the next five years typically considered in the analysts' forecasts and will enhance the growth prospects for the future. As such, a 6.50% growth rate will accommodate all these factors.

Q31. Are the dividend yield and growth components of the DCF adequate to explain the rate of return on common equity when it is used in the calculation of the weighted average cost of capital?

A31. These components are adequate only if the capital structure ratios are measured with the market value of debt and equity, or if the utility's actual capital structure that is used in computing the weighted average cost of capital contains a similar degree of financial risk. That is to say, the cost of equity for the Electric Group that is related to the 60.30% common equity ratio using market values contains financial risk that is similar to the Company's capitalization that contains a 60.60% common equity ratio. Since the financial risk is similar for the Company's actual capital structure and the Electric Group's market capital structure, then no further analysis or adjustments are required.

Q32. Please provide the DCF return based upon your preceding discussion of dividend yield and growth.

A32. As explained previously, I have utilized a six-month average dividend yield ("D_1 /P_0") adjusted in a forward-looking manner for my DCF calculation. This dividend yield is used in conjunction with the growth rate ("g") previously developed. The cost of equity must also include an adjustment to cover flotation costs ("flot.").

Q33. What DCF cost rate have you calculated?

A33. The resulting DCF cost rate is:

	D_1/P_0	+	g	=	k	x	*flot.*	=	K
Electric Group	4.54%	+	6.50%	=	11.04%	x	1.015	=	11.21%

The DCF result shown above represents the simplified (*i.e.*, Gordon) form of the model that contains a constant growth assumption. As indicated by the DCF result shown above, the flotation cost adjustment adds 0.17% (11.21% - 11.04%) to the rate of return on common equity for the Electric Group. In my opinion, this adjustment is reasonable for reasons explained in Appendix E. I should reiterate, however, that the DCF indicated cost rate provides an explanation of the rate of return on common stock market prices without regard to the prospect of a change in the price-earnings multiple. An assumption that there will be no change in the price-earnings multiple is not supported by the realities of the equity market, because price-earnings multiples do not remain constant. This is one of the constraints of this model that makes it important to consider other model results when determining a company's cost of equity.

VI. <u>RISK PREMIUM ANALYSIS</u>

Q34. Please describe your use of the Risk Premium approach to determine the cost of equity.

A34. The details of my use of the Risk Premium approach and the evidence in support of my conclusions are set forth in Appendix G. I will summarize them here. With this method, the cost of equity capital is determined by corporate bond yields plus a premium to account for the fact that common equity is exposed to greater investment risk than debt capital. As with other models of the cost of equity, the Risk Premium approach has its limitations, including potential imprecision in the assessment of the future cost of corporate debt and the measurement of the risk-adjusted common equity premium.

Q35. What long-term public utility debt cost rate did you use in your risk premium analysis?

A35. In my opinion, a 6.00% yield represents a reasonable estimate of the prospective yield on long-term A-rated public utility bonds. The Moody's index and the Blue Chip forecasts support this figure.

The historical yields for long-term public utility debt are shown graphically on page 1 of Schedule 9. For the twelve months ended May 2008, the average monthly yield on Moody's A-rated index of public utility bonds was 6.19%. For the six and three-month periods ended May 2008, the yields were 6.20% and 6.26%, respectively. During the twelve-months ended May 2008, the range of the yields on A-rated public utility bonds was 5.97% to 6.30%.

Q36. What forecasts of interest rates have you considered in your analysis?

A36. I have determined the prospective yield on A-rated public utility debt by using the Blue Chip Financial Forecasts ("Blue Chip") along with the spread in the yields that I describe above and in Appendix F. The Blue Chip is a reliable authority and contains consensus forecasts of a variety of interest rates compiled from a panel of banking, brokerage, and investment advisory services. In early 1999, Blue Chip stopped publishing forecasts of yields on A-rated public utility bonds because the Federal Reserve deleted these yields from its Statistical Release H.15. To independently project a forecast of the yields on A-rated public utility bonds, I have combined the forecast yields on long-term Treasury bonds published on June 1, 2008, and the yield spread of 1.50%. For the past year, A-rated public utility bonds have yielded more than Treasury bonds by 1.79% as the three month average, 1.73% as the six month average, and 1.48% as the twelve months average (see page 5 of Schedule 9). From these averages, 1.50% represents a reasonable spread for the yield on A-rated public utility bonds over Treasury bonds. For comparative purposes, I also have shown the Blue Chip of Aaa-rated and Baa-rated corporate bonds. These forecasts are:

		Blue Chip Financial Forecasts				
		Corporate		30-Year	A-rated Public Utility	
Year	Quarter	Aaa-rated	Baa-rated	Treasury	Spread	Yield
2008	2nd	5.5%	6.9%	4.5%	1.50%	6.00%
2008	3rd	5.6%	6.9%	4.5%	1.50%	6.00%
2008	4th	5.6%	6.9%	4.6%	1.50%	6.10%
2009	1st	5.6%	6.9%	4.7%	1.50%	6.20%
2009	2nd	5.8%	7.0%	4.8%	1.50%	6.30%
2009	3rd	5.9%	7.1%	4.9%	1.50%	6.40%

Q37. Are there additional forecasts of interest rates that extend beyond those shown above?

A37. Yes, it does. Twice yearly, Blue Chip provides long-term forecasts of interest rates. In its June 1, 2008 publication, the Blue Chip published forecasts of interest rates are reported to be:

	Blue Chip Financial Forecasts				
	Corporate		30-Year	A-rated Public Utility	
Averages	Aaa-rated	Baa-rated	Treasury	Spread	Yield
2010-14	6.3%	7.4%	5.3%	1.50%	6.80%
2015-19	6.5%	7.5%	5.5%	1.50%	7.00%

Given these forecasted interest rates, a 6.00% yield on A-rated public utility bonds represents a reasonable expectation.

Q38. What equity risk premium have you determined for public utilities?

A38. Appendix G provides a discussion of the financial returns that I relied upon to develop the appropriate equity risk premium for the S&P Public Utilities. I have calculated the equity risk premium by comparing the market returns on utility stocks and the market returns on utility bonds. I chose the S&P Public Utility index for the purpose of measuring the market returns for utility stocks. The S&P Public Utility index is reflective of the risk associated with regulated utilities, rather than some broader market indexes, such as the S&P 500 Composite index. The S&P Public Utility index is a subset of the overall S&P 500 Composite index. Use of the S&P Public Utility index reduces the role of judgment in establishing the risk premium for public utilities. With the equity risk premiums developed for the S&P Public Utilities as a base, I derived the equity risk premium for the Electric Group.

Q39. What equity risk premium for the S&P Public Utilities have you determined for this case?

A39. To develop an appropriate risk premium, I analyzed the results for the S&P Public Utilities by averaging (i) the midpoint of the range shown by the geometric mean and median and (ii) the arithmetic mean. This procedure has been employed to provide a comprehensive way of measuring the central tendency of the historical returns. As shown by the values set forth on page 2 of Schedule 10, the indicated risk premiums for the various time periods analyzed are 5.51% (1928-2007), 6.58% (1952-2007), 6.08% (1974-2007), and 6.37% (1979-2007). The selection of the shorter periods taken from the entire historical series is designed to provide a risk premium that conforms more nearly to present investment fundamentals, and removes some of the more distant data from the analysis.

Q40. Do you have further support for the selection of the time periods used in your equity risk premium determination?

A40. Yes. First, the terminal year of my analysis presented in Schedule 10 represents the returns realized through 2007. Second, the selection of the initial year of each period was based upon the financial market defining events that I note here and described in Appendix G. These events were fixed in history and cannot be manipulated as later financial data becomes available. That is to say, using the Treasury-Federal Reserve Accord as a defining event, the year 1952 is fixed as the beginning point for the measurement period regardless of the financial results that subsequently occurred. Likewise, 1974 represented a benchmark year because it followed the 1973 Arab Oil embargo. Also, the year 1979 was chosen because it began the deregulation of the financial markets. I consistently use these periods in my work, and additional data are merely added to the earlier results when they become available. The periods chosen are therefore not driven by the desired results of the study.

Q41. What conclusions have you drawn from these data?

A41. Using the summary values provided on page 2 of Schedule 10, the 1928-2007 period provides the lowest indicated risk premium, while the 1952-2007 period provides the highest risk premium for the S&P Public Utilities. Within these bounds, a common equity risk premium of 6.23% (6.08% + 6.37% = 12.45% ÷ 2) is shown from data covering the periods 1974-2007 and 1979-2007. Therefore, 6.23% represents a reasonable risk premium for the S&P Public Utilities in this case.

As noted earlier in my fundamental risk analysis, differences in risk characteristics must be taken into account when applying the results for the S&P Public Utilities to the Electric Group. I recognized these differences in the development of the equity risk premium in this case. I previously enumerated various differences in fundamentals between the Electric Group and the S&P Public Utilities, including size, market ratios, common equity ratio, return on book equity, operating ratios, coverage, quality of earnings, internally generated funds, and betas. In my opinion, these differences indicate that 5.50% represents a reasonable common equity risk premium in this case. This represents approximately 88% (5.50% ÷ 6.23% = 0.88) of the risk premium of the S&P Public Utilities and is reflective of the risk of the Electric Group compared to the S&P Public Utilities.

Q42. What common equity cost rate did you determine using this risk premium analysis?

A42. The cost of equity (*i.e.*, "k") is represented by the sum of the prospective yield for long-term public utility debt (*i.e.*, "i") and the equity risk premium (*i.e.*, "RP"). To that cost must be added an adjustment for common stock financing costs ("flot."). The Risk Premium approach provides a cost of equity of:

	i	+	*RP*	=	*k*	+	*flot.*	=	*K*
Electric Group	6.00%	+	5.50%	=	11.50%	+	0.17%	=	11.67%

VII. <u>CAPITAL ASSET PRICING MODEL</u>

Q43. Have you used the Capital Asset Pricing Model to measure the cost of equity in this case?

A43. Yes, I have used the CAPM in addition to my other methods. As with other models of the cost of equity, the CAPM contains a variety of assumptions and shortcomings that I discuss in Appendix H. Therefore, this method should be used with other methods to measure the cost of equity, as each will complement the other and will provide a result that will alleviate the unavoidable shortcomings found in each method.

Q44. What are the features of the CAPM as you have used it?

A44. The CAPM uses the yield on a risk-free interest bearing obligation plus a rate of return premium that is proportional to the systematic risk of an investment. The details of my use of the CAPM and evidence in support of my conclusions are set forth in Appendix H. To compute the cost of equity with the CAPM, three components are necessary: a risk-free rate of return ("Rf"), the beta measure of systematic risk ("β"), and the market risk premium ("Rm-Rf") derived from the total return on the market of equities reduced by the risk-free rate of return. The CAPM specifically accounts for differences in systematic risk (*i.e.*, market risk as measured by the beta) between an individual firm or group of firms and the entire market of equities. Accordingly, to calculate the CAPM it is necessary to employ firms with traded stocks. In this regard, I performed a CAPM calculation for the Electric Group. In contrast, my Risk Premium approach also considers industry- and company-specific factors because it is not limited to measuring just systematic risk. As a consequence, the Risk Premium approach is more comprehensive than the CAPM. In addition, the Risk Premium approach provides a better measure of the cost of equity because it is founded upon the yields on corporate bonds rather than Treasury bonds.

Q45. What betas have you considered in the CAPM?

A45. For my CAPM analysis, I initially considered the Value Line betas. As shown on page 1 of Schedule 11, the average beta is .85 for the Electric Group. Since the financial risk of the Electric Group's market capitalization equals the financial risk of the Company's book value capitalization, there is no need to adjust the betas.

Q46. What risk-free rate have you used in the CAPM?

A46. For reasons explained in Appendix F, I have employed the yields on 20-year Treasury bonds using both historical and forecast data to match the longer-term horizon associated with the ratesetting process. As shown on pages 2 and 3 of Schedule 11, I provided the historical yields on Treasury notes and bonds. For the twelve months ended May 2008, the average yield was 4.71%, as shown on page 3 of that schedule. For the six- and three-months ended May 2006, the yields on 20-year Treasury bonds were 4.47% and 4.47%, respectively. As shown on page 4 of Schedule 11, forecasts published by Blue Chip on June 1, 2008 indicate that the yields on long-term Treasury bonds are expected to be in the range of 4.5% to 4.9% during the next six quarters. The longer term forecasts described previously show that the yields on Treasury bonds will average 5.3% from 2010 through 2014 and 5.5% from 2015 to 2019. For reasons explained previously, forecasts of interest rates should be emphasized at this time. Hence, I have used a 4.50% risk-free rate of return for CAPM purposes, which considers not only the Blue Chip forecasts, but also the recent trend in the yields on long-term Treasury bonds.

Q47. What market premium have you used in the CAPM?

A47. As shown in Appendix H, the market premium is developed by averaging historical market performance (*i.e.*, 6.5%) and the forecasts (*i.e.*, 10.37%). For the historically based market premium, I have used the arithmetic mean. The resulting market premium is 8.44% (6.5% + 10.37% = 16.87% ÷ 2), which represents the average market premium using historical and forecast data.

Q48. Are there adjustments to the CAPM results that are necessary to fully reflect the rate of return on common equity?

A48. Yes. The technical literature supports an adjustment relating to the size of the company or portfolio for which the calculation is performed. As the size of a firm decreases, its risk and, hence, its required return increases. Moreover, in his discussion of the cost of capital, Professor Brigham has indicated that smaller firms have higher capital costs then otherwise similar larger firms (see Fundamentals of Financial Management, fifth edition, page 623). Also, the Fama/French study (see "The Cross-Section of Expected Stock Returns"; The Journal of Finance, June 1992) established that size of a firm helps explain stock returns. In an October 15, 1995 article in Public Utility Fortnightly, entitled "Equity and the Small-Stock Effect," it was demonstrated that the CAPM could understate the cost of equity significantly according to a company's size. Indeed, it was demonstrated in the SBBI Yearbook that the returns for stocks in lower deciles (*i.e.*, smaller stocks) had returns in excess of those shown by the simple CAPM. In this regard, Electric Group has an average market capitalization of its equity of $7,893 million, which would make them a mid-cap portfolio. The mid-cap market capitalization would indicate a size premium of 0.92% as published in the 2008 SBBI Yearbook. Absent such an adjustment, the CAPM would understate the required return.

Q49. What CAPM result have you determined using the CAPM?

A49. Using the 4.50% risk-free rate of return, the beta of 0.85 for the Electric Group, the 8.44% market premium, the size adjustment, and the flotation cost adjustment developed previously, the following result is indicated.

	Rf	+	*ß*	*x (*	*Rm-Rf*	*)*	=	*k*	+	*size*	+	*flot.*	=	*K*
Electric Group	4.50%	+	0.85	x (	8.44%	)	=	11.67%	+	0.92%	+	0.17%	=	12.76%

VIII. COMPARABLE EARNINGS APPROACH

Q50. How have you applied the Comparable Earnings approach in this case?

A50. The technical aspects of the Comparable Earnings approach are set forth in Appendix I. Because regulation is a substitute for competitively-determined prices, the returns realized by non-regulated firms with comparable risks to a public utility provide useful insight into a fair rate of return. In order to identify the appropriate return, it is necessary to analyze returns earned (or realized) by other firms within the context of the Comparable Earnings standard. The firms selected for the Comparable Earnings approach should be companies whose prices are not subject to cost-based price ceilings (*i.e.*, non-regulated firms) so that circularity is avoided.

There are two avenues available to implement the Comparable Earnings approach. One method would involve the selection of another industry (or industries) with comparable risks to the public utility in question, and the results for all companies within that industry would serve as a benchmark. The second approach requires the selection of parameters that represent similar risk traits for the public utility and the comparable risk companies. Using this approach, the business lines of the comparable companies become unimportant. The latter approach is preferable with the further qualification that the comparable risk companies exclude regulated firms in order to avoid the circular reasoning implicit in the use of the achieved earnings/book ratios of other regulated firms. The United States Supreme Court has held that:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in

> the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties.... The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. Bluefield Water Works vs. Public Service Commission, 262 U.S. 668 (1923).

Therefore, it is important to identify the returns earned by firms that compete for capital with a public utility. This can be accomplished by analyzing the returns of non-regulated firms that are subject to the competitive forces of the marketplace.

Q51. How have you implemented the Comparable Earnings approach?

A51. In order to implement the Comparable Earnings approach, non-regulated companies were selected from the Value Line Investment Survey for Windows that have six categories (see Appendix I for definitions) of comparability designed to reflect the risk of the Electric Group. These screening criteria were based upon the range as defined by the rankings of the companies in the Electric Group. The items considered were: Timeliness Rank, Safety Rank, Financial Strength, Price Stability, Value Line betas, and Technical Rank. The identities of the companies comprising the Comparable Earnings group and its associated rankings within the ranges are identified on page 1 of Schedule 12.

Value Line data was relied upon because it provides a comprehensive basis for evaluating the risks of the comparable firms. As to the returns calculated by Value Line for these companies, there is some downward bias in the figures shown on page 2 of Schedule 12, because Value Line computes the returns on year-end rather than average book value. If average book values had been employed, the rates of return would have been slightly higher. Nevertheless, these are the returns considered by investors when taking positions in these stocks. Because many of the comparability factors, as well as the published returns, are used by investors for selecting stocks, and to the extent that investors rely on the Value Line service to gauge its returns, it is, therefore, an appropriate database for measuring comparable return opportunities.

Q52. What data have you used in your Comparable Earnings analysis?

A52. I have used both historical realized returns and forecasted returns for non-utility companies. As noted previously, I have not used returns for utility companies in order to avoid the circularity that arises from using regulatory-influenced returns to determine a regulated return. It is appropriate to consider a relatively long measurement period in the Comparable Earnings approach in order to cover conditions over an entire business cycle. A ten-year period (5 historical years and 5 projected years) is sufficient to cover an average business cycle. Unlike the DCF and CAPM, the results of the Comparable Earnings method can be applied directly to the book value capitalization because, the nature of the analysis relates to book value. Hence, Comparable Earnings does not contain the potential misspecification contained in market models when the market capitalization and book value capitalization diverge significantly. The historical rate of return on book common equity was 15.4% using the median value as shown on page 2 of Schedule 12. The forecast rates of return, as published by Value Line are shown by the 16.0% median values also provided on page 2 of Schedule 12.

Q53. What rate of return on common equity have you determined in this case using the Comparable Earnings approach?

A53. The average of the historical and forecast median rates of return is:

	Historical	*Forecast*	*Average*
Comparable Earnings Group	15.40%	16.0%	15.70%

As noted previously, I have used the results from the Comparable Earnings method to confirm the results of the market based models.

IX. CONCLUSION ON COST OF EQUITY

Q54. What is your conclusion concerning the Company's cost of common equity?

A54. Based upon the application of a variety of methods and models described previously, it is my opinion that the reasonable cost of common equity is 12.00% for the Company. It is essential that the Commission employ a variety of techniques to measure the Company's cost of equity because of the limitations/infirmities that are inherent in each method.

X. COST OF DEBT

Q55. Have you reviewed the calculation of the cost of long-term debt that is contained in Petitioner's Exhibit LEM-5, page 3 of 3 and Petitioner's Exhibit LEM-9, page 3 of 3

A55. Yes.

Q56. Are the ratesetting adjustments reflected in those calculations appropriate?

A56. Yes. The principal amount of long-term debt has been adjusted to exclude the amounts used to finance premiums on the early redemption of high-cost securities that were previously redeemed. This adjustment is necessary in order to recover the full return on the premiums paid to redeem the high cost debt since additional amounts of capital were issued to pay the call premiums. The amounts issued to finance the call premiums do not increase the Company's rate base. That is to say, no additional rate base was created through additional capital necessary to finance this transaction, and therefore an adjustment is required to provide the return necessary to service this additional capital. Hence, NIPSCO's long-term debt amounts must be adjusted for this disparity in order that the return necessary to service the capitalization is produced from rate base investment times the overall rate of return.

This adjustment is equitable because customers receive the cost savings resulting from these refinancings in the form of a lower overall rate of return, and NIPSCO recovers all costs incurred in providing these benefits to customers. To produce these savings, the Company paid the debt holders a premium for surrendering their securities prior to maturity. These premiums represented an investment made by NIPSCO to reduce its overall cost of capital. Because the reduced interest costs are reflected in the lower cost of capital to customers, it is appropriate that the Company recover the costs incurred to produce these savings. This includes both a return of and return on the unamortized premiums. Adjusting the principal amounts in the capital structure provides a return on the premium as a part of the embedded cost of debt. The amortization of the premium, as part of the Company's debt service costs, provides a return of the premiums.

XI. FAIR VALUE RATE BASE

Q57. Have you also considered what would represent the fair value of the Company's property?

A57. Yes. I have derived a fair value rate base for the Company that gives weight to both the replacement cost new less depreciation ("Replacement Cost") and the original cost less depreciation ("Original Cost") of the Company's utility property. In particular, I have derived a weighted fair value rate base by giving 49.76% weight to Replacement Cost and 50.23% weight to Original Cost. These relative weights were determined from the capital structure ratios calculated by NIPSCO Witness Linda E. Miller, as shown on page 1 of Petitioner's Exhibit LEM-5. The 49.76% weight assigned to the Replacement Cost value represents the Company's common equity ratio. The weight assigned to the Original Cost represents the remaining components of the Company's ratesetting capital structure. This method represents a compromise approach that is intended to make sure that, at a minimum the Company gets the benefit of the appreciation in value of its assets to the extent they were financed by the common equity investor.

Q58. What amount did you use for the Replacement Cost of the property?

A58. My starting point was the replacement cost less depreciation valuation of the Company's utility plant in service as of December 31, 2007 performed by NIPSCO Witness John P. Kelly adjusted for economic depreciation, which is shown on Petitioner's Exhibit JPK-3 to be $6,329,750,643. To this amount, I added the deferred charges, proposed pension asset, materials and supplies and production fuel shown on Petitioner's Exhibit LEM-4, page 1 of 2, sponsored by Ms. Miller which total \$152,587,331. This resulted in a total Replacement Cost rate base of \$6,482,337,974.

Q59. What amount did you use for the Original Cost of the Company's property?

A59. I used the amount of \$2,341,480,136, which is the Original Cost rate base supported by Ms. Miller as shown on Petitioner's Exhibit LEM-4, page 1.

Q60. What weighted fair value rate base did you derive from this data?

A60. Using the methodology described above, I developed a fair value rate base of \$4,401,736,848 as follows:

Valuation Method	Amount	Weight	Weighted Amount
Replacement Cost	\$ 6,482,337,974	49.76%	\$ 3,225,611,376
Original Cost	\$ 2,341,480,136	50.23%	\$ 1,176,125,472
Fair Value		99.99%	\$ 4,401,736,848

Q61. Does this conclude your prepared direct testimony?

A61. Yes.

VERIFICATION

I, Paul R. Moul, Managing Consultant for P. Moul & Associates., affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

Paul R. Moul

Paul R. Moul

Date: August 25, 2008

Petitioner's Exhibit PRM-1
Northern Indiana Public Service Company
Cause No. 43526

NORTHERN INDIANA PUBLIC SERVICE COMPANY

Appendices A Through I to Accompany

the Direct Testimony

of

Paul R. Moul
Managing Consultant
P. Moul & Associates

Concerning

Cost of Equity
and
Rate of Return

APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

EDUCATIONAL BACKGROUND, BUSINESS EXPERIENCE AND QUALIFICATIONS

I was awarded a degree of Bachelor of Science in Business Administration by Drexel University in 1971. While at Drexel, I participated in the Cooperative Education Program which included employment, for one year, with American Water Works Service Company, Inc., as an internal auditor, where I was involved in the audits of several operating water companies of the American Water Works System and participated in the preparation of annual reports to regulatory agencies and assisted in other general accounting matters.

Upon graduation from Drexel University, I was employed by American Water Works Service Company, Inc., in the Eastern Regional Treasury Department where my duties included preparation of rate case exhibits for submission to regulatory agencies, as well as responsibility for various treasury functions of the thirteen New England operating subsidiaries.

In 1973, I joined the Municipal Financial Services Department of Betz Environmental Engineers, a consulting engineering firm, where I specialized in financial studies for municipal water and wastewater systems.

In 1974, I joined Associated Utility Services, Inc., now known as AUS Consultants. I held various positions with the Utility Services Group of AUS Consultants, concluding my employment there as a Senior Vice President.

In 1994, I formed P. Moul & Associates, an independent financial and regulatory consulting firm. In my capacity as Managing Consultant and for the past twenty-nine years, I have continuously studied the rate of return requirements for cost of service-regulated firms. In

APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

this regard, I have supervised the preparation of rate of return studies, which were employed, in connection with my testimony and in the past for other individuals. I have presented direct testimony on the subject of fair rate of return, evaluated rate of return testimony of other witnesses, and presented rebuttal testimony.

My studies and prepared direct testimony have been presented before thirty-three (33) federal, state and municipal regulatory commissions, consisting of: the Federal Energy Regulatory Commission; state public utility commissions in Alabama, Alaska, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin; and the Philadelphia Gas Commission. My testimony has been offered in over 200 rate cases involving electric power, natural gas distribution and transmission, resource recovery, solid waste collection and disposal, telephone, wastewater, and water service utility companies. While my testimony has involved principally fair rate of return and financial matters, I have also testified on capital allocations, capital recovery, cash working capital, income taxes, factoring of accounts receivable, and take-or-pay expense recovery. My testimony has been offered on behalf of municipal and investor-owned public utilities and for the staff of a regulatory commission. I have also testified at an Executive Session of the State of New Jersey Commission of Investigation concerning the BPU regulation of solid waste collection and disposal.

APPENDIX A TO DIRECT TESTIMONY OF PAUL R. MOUL

I was a co-author of a verified statement submitted to the Interstate Commerce Commission concerning the 1983 Railroad Cost of Capital (Ex Parte No. 452). I was also co-author of comments submitted to the Federal Energy Regulatory Commission regarding the Generic Determination of Rate of Return on Common Equity for Public Utilities in 1985, 1986 and 1987 (Docket Nos. RM85-19-000, RM86-12-000, RM87-35-000 and RM88-25-000). Further, I have been the consultant to the New York Chapter of the National Association of Water Companies, which represented the water utility group in the Proceeding on Motion of the Commission to Consider Financial Regulatory Policies for New York Utilities (Case 91-M-0509). I have also submitted comments to the Federal Energy Regulatory Commission in its Notice of Proposed Rulemaking (Docket No. RM99-2-000) concerning Regional Transmission Organizations and on behalf of the Edison Electric Institute in its intervention in the case of Southern California Edison Company (Docket No. ER97-2355-000). Also, I was a member of the panel of participants at the Technical Conference in Docket No. PL07-2 on the Composition of Proxy Groups for Determining Gas and Oil Pipeline Return on Equity.

In late 1978, I arranged for the private placement of bonds on behalf of an investor-owned public utility. I have assisted in the preparation of a report to the Delaware Public Service Commission relative to the operations of the Lincoln and Ellendale Electric Company. I was also engaged by the Delaware P.S.C. to review and report on the proposed financing and disposition of certain assets of Sussex Shores Water Company (P.S.C. Docket Nos. 24-79 and 47-79). I was a co-author of a Report on Proposed Mandatory Solid Waste Collection Ordinance prepared for the Board of County Commissioners of Collier County, Florida.

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I have been a consultant to the Bucks County Water and Sewer Authority concerning rates and charges for wholesale contract service with the City of Philadelphia. My municipal consulting experience also included an assignment for Baltimore County, Maryland, regarding the City/County Water Agreement for Metropolitan District customers (Circuit Court for Baltimore County in Case 34/153/87-CSP-2636).

I am a member of the Society of Utility and Regulatory Financial Analysis (formerly the National Society of Rate of Return Analysts) and have attended several Financial Forums sponsored by the Society. I attended the first National Regulatory Conference at the Marshall-Wythe School of Law, College of William and Mary. I also attended an Executive Seminar sponsored by the Colgate Darden Graduate Business School of the University of Virginia concerning Regulated Utility Cost of Equity and the Capital Asset Pricing Model. In October 1984, I attended a Standard & Poor's Seminar on the Approach to Municipal Utility Ratings, and in May 1985, I attended an S&P Seminar on Telecommunications Ratings.

My lecture and speaking engagements include:

Date	Occasion	Sponsor
April 2006	Thirty-eighth Financial Forum	Society of Utility & Regulatory Financial Analysts
April 2001	Thirty-third Financial Forum	Society of Utility & Regulatory Financial Analysts
December 2000	Pennsylvania Public Utility Law Conference: Non-traditional Players in the Water Industry	Pennsylvania Bar Institute
July 2000	EEI Member Workshop Developing Incentives Rates: Application and Problems	Edison Electric Institute

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February 2000	The Sixth Annual FERC Briefing	Exnet and Bruder, Gentile & Marcoux, LLP
March 1994	Seventh Annual Proceeding	Electric Utility Business Environment Conf.
May 1993	Financial School	New England Gas Assoc.
April 1993	Twenty-Fifth Financial Forum	National Society of Rate of Return Analysts
June 1992	Rate and Charges Subcommittee Annual Conference	American Water Works Association
May 1992	Rates School	New England Gas Assoc.
October 1989	Seventeenth Annual Eastern Utility Rate Seminar	Water Committee of the National Association of Regulatory Utility Commissioners Florida Public Service Commission and University of Utah
October 1988	Sixteenth Annual Eastern Utility Rate Seminar	Water Committee of the National Association of Regulatory Utility Commissioners, Florida Public Service Commission and University of Utah
May 1988	Twentieth Financial Forum	National Society of Rate of Return Analysts
October 1987	Fifteenth Annual Eastern Utility Rate Seminar	Water Committee of the National Association of Regulatory Utility Commissioners, Florida Public Service Commis-sion and University of Utah
September 1987	Rate Committee Meeting	American Gas Association
May 1987	Pennsylvania Chapter annual meeting	National Association of Water Companies
October 1986	Eighteenth Financial Forum	National Society of Rate of Return

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October 1984	Fifth National on Utility Ratemaking Fundamentals	American Bar Association
March 1984	Management Seminar	New York State Telephone Association
February 1983	The Cost of Capital Seminar	Temple University, School of Business Admin.
May 1982	A Seminar on Regulation and The Cost of Capital	New Mexico State University, Center for Business Research and Services
October 1979	Economics of Regulation	Brown University

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EVALUATION OF RISK

The rate of return required by investors is directly linked to the perceived level of risk. The greater the risk of an investment, the higher is the required rate of return necessary to compensate for that risk all else being equal. Because investors will seek the highest rate of return available, considering the risk involved, the rate of return must at least equal the investor-required, market-determined cost of capital if public utilities are to attract the necessary investment capital on reasonable terms.

In the measurement of the cost of capital, it is necessary to assess the risk of a firm. The level of risk for a firm is often defined as the uncertainty of achieving expected performance, and is sometimes viewed as a probability distribution of possible outcomes. Hence, if the uncertainty of achieving an expected outcome is high, the risk is also high. As a consequence, high risk firms must offer investors higher returns than low risk firms, which pay less to attract capital from investors. This is because the level of uncertainty, or risk of not realizing expected returns, establishes the compensation required by investors in the capital markets. Of course, the risk of a firm must also be considered in the context of its ability to actually experience adequate earnings, which conform with a fair rate of return. Thus, if there is a high probability that a firm will not perform well due to fundamentally poor market conditions, investors will demand a higher return.

The investment risk of a firm is comprised of its business risk and financial risk. Business risk is all risk other than financial risk, and is sometimes defined as the staying power of the market demand for a firm's product or service and the resulting inherent uncertainty of

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realizing expected pre-tax returns on the firm's assets. Business risk encompasses all operating factors, e.g., productivity, competition, management ability, etc. that bear upon the expected pre-tax operating income attributed to the fundamental nature of a firm's business. Financial risk results from a firm's use of borrowed funds (or similar sources of capital with fixed payments) in its capital structure, i.e., financial leverage. Thus, if a firm did not employ financial leverage by borrowing any capital, its investment risk would be represented by its business risk.

It is important to note that in evaluating the risk of regulated companies, financial leverage cannot be considered in the same context as it is for non-regulated companies. Financial leverage has a different meaning for regulated firms than for non-regulated companies. For regulated public utilities, the cost of service formula gives the benefits of financial leverage to consumers in the form of lower revenue requirements. For non-regulated companies, all benefits of financial leverage are retained by the common stockholder. Although retaining none of the benefits, regulated firms bear the risk of financial leverage. Therefore, a regulated firm's rate of return on common equity must recognize the greater financial risk shown by the higher leverage typically employed by public utilities.

Although no single index or group of indices can precisely quantify the relative investment risk of a firm, financial analysts use a variety of indicators to assess that risk. For example, the creditworthiness of a firm is revealed by its bond ratings. If the stock is traded, the price-earnings multiple, dividend yield, and beta coefficients (a statistical measure of a stock's relative volatility to the rest of the market) provide some gauge of overall risk. Other indicators, which are reflective of business risk, include the variability of the rate of return on equity, which

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is indicative of the uncertainty of actually achieving the expected earnings; operating ratios (the percentage of revenues consumed by operating expenses, depreciation, and taxes other than income tax), which are indicative of profitability; the quality of earnings, which considers the degree to which earnings are the product of accounting principles or cost deferrals; and the level of internally generated funds. Similarly, the proportion of senior capital in a company's capitalization is the measure of financial risk, which is often analyzed in the context of the equity ratio (i.e., the complement of the debt ratio).

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COST OF EQUITY--GENERAL APPROACH

Through a fundamental financial analysis, the relative risk of a firm must be established prior to the determination of its cost of equity. Any rate of return recommendation, which lacks such a basis, will inevitably fail to provide a utility with a fair rate of return except by coincidence. With a fundamental risk analysis as a foundation, standard financial models can be employed by using informed judgment. The methods, which have been employed to measure the cost of equity, include: the Discounted Cash Flow ("DCF") model, the Risk Premium ("RP") approach, the Capital Asset Pricing Model ("CAPM") and the Comparable Earnings ("CE") approach.

The traditional DCF model, while useful in providing some insight into the cost of equity, is not an approach that should be used exclusively. The divergence of stock prices from company-specific fundamentals can provide a misleading cost of equity calculation. As reported in The Wall Street Journal on June 6, 1991, a statistical study published by Goldman Sachs indicated that only 35% of stock price growth in the 1980's could be attributed to earnings and interest rates. Further, 38% of the rise in stock prices during the 1980's was attributed to unknown factors. The Goldman Sachs study highlights the serious limitations of a model, such as DCF, which is founded upon identification of specific variables to explain stock price growth. That is to say, when stock price growth exceeds growth in a company's earnings per share, models such as DCF will misspecify investor expected returns, which are comprised of capital

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gains, as well as dividend receipts. As such, a combination of methods should be used to measure the cost of equity.

The Risk Premium analysis is founded upon the prospective cost of long-term debt, i.e., the yield that the public utility must offer to raise long-term debt capital directly from investors. To that yield must be added a risk premium in recognition of the greater risk of common equity over debt. This additional risk is, of course, attributable to the fact that the payment of interest and principal to creditors has priority over the payment of dividends and return of capital to equity investors. Hence, equity investors require a higher rate of return than the yield on long-term corporate bonds.

The CAPM is a model not unlike the traditional Risk Premium. The CAPM employs the yield on a risk-free interest-bearing obligation plus a premium as compensation for risk. Aside from the reliance on the risk-free rate of return, the CAPM gives specific quantification to systematic (or market) risk as measured by beta.

The Comparable Earnings approach measures the returns expected/experienced by other non-regulated firms and has been used extensively in rate of return analysis for over a half century. However, its popularity diminished in the 1970s and 1980s with the popularization of market-based models. Recently, there has been renewed interest in this approach. Indeed, the financial community has expressed the view that the regulatory process must consider the returns, which are being achieved in the non-regulated sector so that public utilities can compete effectively in the capital markets. Indeed, with additional competition being introduced

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throughout the traditionally regulated public utility industry, returns expected to be realized by non-regulated firms have become increasing relevant in the ratesetting process. The Comparable Earnings approach considers directly those requirements and it fits the established standards for a fair rate of return set forth in the landmark decisions on the issue of rate of return. These decisions require that a fair return for a utility must be equal to that earned by firms of comparable risk.

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DISCOUNTED CASH FLOW ANALYSIS

Discounted Cash Flow ("DCF") theory seeks to explain the value of an economic or financial asset as the present value of future expected cash flows discounted at the appropriate risk-adjusted rate of return. Thus, if \$100 is to be received in a single payment 10 years subsequent to the acquisition of an asset, and the appropriate risk-related interest rate is 8%, the present value of the asset would be \$46.32 (Value = \$100 ÷ $(1.08)^{10}$) arising from the discounted future cash flow. Conversely, knowing the present \$46.32 price of an asset (where price = value), the \$100 future expected cash flow to be received 10 years hence shows an 8% annual rate of return implicit in the price and future cash flows expected to be received.

In its simplest form, the DCF theory considers the number of years from which the cash flow will be derived and the annual compound interest rate, which reflects the risk or uncertainty, associated with the cash flows. It is appropriate to reiterate that the dollar values to be discounted are future cash flows.

DCF theory is flexible and can be used to estimate value (or price) or the annual required rate of return under a wide variety of conditions. The theory underlying the DCF methodology can be easily illustrated by utilizing the investment horizon associated with a preferred stock not having an annual sinking fund provision. In this case, the investment horizon is infinite, which reflects the perpetuity of a preferred stock. If P represents price, Kp is the required rate of return on a preferred stock, and D is the annual dividend (P and D with time subscripts), the value of a

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preferred share is equal to the present value of the dividends to be received in the future discounted at the appropriate risk-adjusted interest rate, *Kp*. In this circumstance:

$$P_0 = \frac{D_1}{(1+Kp)} + \frac{D_2}{(1+Kp)^2} + \frac{D_3}{(1+Kp)^3} + \ldots + \frac{D_n}{(1+Kp)^n}$$

If $D_1 = D_2 = D_3 = \ldots D_n$ as is the case for preferred stock, and n approaches infinity, as is the case for non-callable preferred stock without a sinking fund, then this equation reduces to:

$$P_0 = \frac{D_1}{Kp}$$

This equation can be used to solve for the annual rate of return on a preferred stock when the current price and subsequent annual dividends are known. For example, with D_1 = \$1.00, and P_0 = \$10, then Kp = \$1.00 ÷ \$10, or 10%.

The dividend discount equation, first shown, is the generic DCF valuation model for all equities, both preferred and common. While preferred stock generally pays a constant dividend, permitting the simplification subsequently noted, common stock dividends are not constant. Therefore, absent some other simplifying condition, it is necessary to rely upon the generic form of the DCF. If, however, it is assumed that $D_1, D_2, D_3, \ldots D_n$ are systematically related to one another by a constant growth rate (g), so that $D_0(1+g) = D_1$, $D_1(1+g) = D_2$, $D_2(1+g) = D_3$ and so on approaching infinity, and if *Ks* (the required rate of return on a common stock) is greater than g, then the DCF equation can be reduced to:

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$$P_0 = \frac{D_1}{Ks - g} \quad or \quad P_0 = \frac{D_0(1+g)}{Ks - g}$$

which is the periodic form of the "Gordon" model.[1] Proof of the DCF equation is found in all modern basic finance textbooks. This DCF equation can be easily solved as:

$$Ks = \frac{D_0(1+g)}{P_0} + g$$

which is the periodic form of the Gordon Model commonly applied in estimating equity rates of return in rate cases. When used for this purpose, *Ks* is the annual rate of return on common equity demanded by investors to induce them to hold a firm's common stock. Therefore, the variables D_0, P_0 and g must be estimated in the context of the market for equities, so that the rate of return, which a public utility is permitted the opportunity to earn, has meaning and reflects the investor-required cost rate.

Application of the Gordon model with market derived variables is straightforward. For example, using the most recent prior annualized dividend (D_0) of $0.80, the current price (P_0) of $10.00, and the investor expected dividend growth rate (g) of 5%, the solution of the DCF formula provides a 13.4% rate of return. The dividend yield component in this instance is 8.4%, and the capital gain component is 5%, which together represent the total 13.4% annual rate of

[1]Although the popular application of the DCF model is often attributed to the work of Myron J. Gordon in the mid-1950's, J. B. Williams exposited the DCF model in its present form nearly two decades earlier.

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return required by investors. The capital gain component of the total return may be calculated with two adjacent future year prices. For example, in the eleventh year of the holding period, the price per share would be $17.10 as compared with the price per share of $16.29 in the tenth year which demonstrates the 5% annual capital gain yield.

Some DCF devotees believe that it is more appropriate to estimate the required return on equity with a model which permits the use of multiple growth rates. This may be a plausible approach to DCF, where investors expect different dividend growth rates in the near term and long run. If two growth rates, one near term and one long-run, are to be used in the context of a price (P_0) of $10.00, a dividend (D_0) of $0.80, a near-term growth rate of 5.5%, and a long-run expected growth rate of 5.0% beginning at year 6, the required rate of return is 13.57% solved with a computer by iteration.

Dividend Yield

The historical annual dividend yield for the Electric Group is shown on Schedule 3. The 2003-2007 five-year average dividend yield was 4.1% for the Electric Group. The monthly dividend yields for the past twelve months are shown graphically on Schedule 5. These dividend yields reflect an adjustment to the month-end closing prices to remove the pro rata accumulation of the quarterly dividend amount since the last ex-dividend date.

The ex-dividend date usually occurs two business days before the record date of the dividend (i.e., the date by which a shareholder must own the shares to be entitled to the dividend payment--usually about two to three weeks prior to the actual payment). During a quarter (here

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defined as 91 days), the price of a stock moves up ratably by the dividend amount as the ex-dividend date approaches. The stock's price then falls by the amount of the dividend on the ex-dividend date. Therefore, it is necessary to calculate the fraction of the quarterly dividend since the time of the last ex-dividend date and to remove that amount from the price. This adjustment reflects normal recurring pricing of stocks in the market, and establishes a price which will reflect the true yield on a stock.

A six-month average dividend yield has been used to recognize the prospective orientation of the ratesetting process as explained in the direct testimony. For the purpose of a DCF calculation, the average dividend yields must be adjusted to reflect the prospective nature of the dividend payments, i.e., the higher expected dividends for the future rather than the recent dividend payment annualized. An adjustment to the dividend yield component, when computed with annualized dividends, is required based upon investor expectation of quarterly dividend increases.

The procedure to adjust the average dividend yield for the expectation of a dividend increase during the initial investment period will be at a rate of one-half the growth component, developed below. The DCF equation, showing the quarterly dividend payments as D_0, may be stated in this fashion:

$$K = \frac{D_0(1+g)^0 + D_0(1+g)^0 + D_0(1+g)^1 + D_0(1+g)^1}{P_0} + g$$

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The adjustment factor, based upon one-half the expected growth rate developed in my direct testimony, will be 3.250% (6.50% x .5) for the Electric Group, which assumes that two dividend payments will be at the expected higher rate during the initial investment period. Using the six-month average dividend yield as a base, the prospective (forward) dividend yield would be 4.53% (4.39% x 1.03250) for the Electric Group.

Another DCF model that reflects the discrete growth in the quarterly dividend (D_0) is as follows:

$$K = \frac{D_0(1+g)^{.25} + D_0(1+g)^{.50} + D_0(1+g)^{.75} + D_0(1+g)^{1.00}}{P_0} + g$$

This procedure confirms the reasonableness of the forward dividend yield previously calculated. The quarterly discrete adjustment provides a dividend yield of 4.57% (4.39% x 1.04031) for the Electric Group. The use of an adjustment is required for the periodic form of the DCF in order to properly recognize that dividends grow on a discrete basis.

In either of the preceding DCF dividend yield adjustments, there is no recognition for the compound returns attributed to the quarterly dividend payments. Investors have the opportunity to reinvest quarterly dividend receipts. Recognizing the compounding of the periodic quarterly dividend payments (D_0), results in a third DCF formulation:

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$$k = \left[\left(1 + \frac{D_0}{P_0} \right)^4 - 1 \right] + g$$

This DCF equation provides no further recognition of growth in the quarterly dividend. Combining discrete quarterly dividend growth with quarterly compounding would provide the following DCF formulation, stating the quarterly dividend payments *(D_0)*:

$$k = \left[\left(1 + \frac{D_0 (1 + g)^{.25}}{P_0} \right)^4 - 1 \right] + g$$

A compounding of the quarterly dividend yield provides another procedure to recognize the necessity for an adjusted dividend yield. The unadjusted average quarterly dividend yield was 1.0975% (4.39% ÷ 4) for the Electric Group. The compound dividend yield would be 4.53% (1.011149^4-1) for the Electric Group, recognizing quarterly dividend payments in a forward-looking manner. These dividend yields conform with investors' expectations in the context of reinvestment of their cash dividend.

For the Electric Group, a 4.54% forward-looking dividend yield is the average (4.53% + 4.57% + 4.53% = 13.63% ÷ 3) of the adjusted dividend yield using the form $D_0 / P_0 (1+.5g)$, the dividend yield recognizing discrete quarterly growth, and the quarterly compound dividend yield with discrete quarterly growth.

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Growth Rate

If viewed in its infinite form, the DCF model is represented by the discounted value of an endless stream of growing dividends. It would, however, require 100 years of future dividend payments so that the discounted value of those payments would equate to the present price so that the discount rate and the rate of return shown by the simplified Gordon form of the DCF model would be about the same. A century of dividend receipts represents an unrealistic investment horizon from almost any perspective. Because stocks are not held by investors forever, the growth in the share value (i.e., capital appreciation, or capital gains yield) is most relevant to investors' total return expectations. Hence, investor expected returns in the equity market are provided by capital appreciation of the investment as well as receipt of dividends. As such, the sale price of a stock can be viewed as a liquidating dividend which can be discounted along with the annual dividend receipts during the investment holding period to arrive at the investor expected return.

In its constant growth form, the DCF assumes that with a constant return on book common equity and constant dividend payout ratio, a firm's earnings per share, dividends per share and book value per share will grow at the same constant rate, absent any external financing by a firm. Because these constant growth assumptions do not actually prevail in the capital markets, the capital appreciation potential of an equity investment is best measured by the expected growth in earnings per share. Since the traditional form of the DCF assumes no change in the price-earnings multiple, the value of a firm's equity will grow at the same rate as earnings

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per share. Hence, the capital gains yield is best measured by earnings per share growth using company-specific variables.

Investors consider both historical and projected data in the context of the expected growth rate for a firm. An investor can compute historical growth rates using compound growth rates or growth rate trend lines. Otherwise, an investor can rely upon published growth rates as provided in widely-circulated, influential publications. However, a traditional constant growth DCF analysis that is limited to such inputs suffers from the assumption of no change in the price-earnings multiple, i.e., that the value of a firm's equity will grow at the same rate as earnings. Some of the factors which actually contribute to investors' expectations of earnings growth and which should be considered in assessing those expectations, are: (i) the earnings rate on existing equity, (ii) the portion of earnings not paid out in dividends, (iii) sales of additional common equity, (iv) reacquisition of common stock previously issued, (v) changes in financial leverage, (vi) acquisitions of new business opportunities, (vii) profitable liquidation of assets, and (viii) repositioning of existing assets. The realities of the equity market regarding total return expectations, however, also reflect factors other than these inputs. Therefore, the DCF model contains overly restrictive limitations when the growth component is stated in terms of earnings per share (the basis for the capital gains yield) or dividends per share (the basis for the infinite dividend discount model). In these situations, there is inadequate recognition of the capital gains yields arising from stock price growth which could exceed earnings or dividends growth.

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To assess the growth component of the DCF, analysts' projections of future growth influence investor expectations as explained above. One influential publication is The Value Line Investment Survey which contains estimated future projections of growth. The Value Line Investment Survey provides growth estimates which are stated within a common economic environment for the purpose of measuring relative growth potential. The basis for these projections is the Value Line 3 to 5 year hypothetical economy. The Value Line hypothetical economic environment is represented by components and subcomponents of the National Income Accounts which reflect in the aggregate assumptions concerning the unemployment rate, manpower productivity, price inflation, corporate income tax rate, high-grade corporate bond interest rates, and Fed policies. Individual estimates begin with the correlation of sales, earnings and dividends of a company to appropriate components or subcomponents of the future National Income Accounts. These calculations provide a consistent basis for the published forecasts. Value Line's evaluation of a specific company's future prospects are considered in the context of specific operating characteristics that influence the published projections. Of particular importance for regulated firms, Value Line considers the regulatory quality, rates of return recently authorized, the historic ability of the firm to actually experience the authorized rates of return, the firm's budgeted capital spending, the firm's financing forecast, and the dividend payout ratio. The wide circulation of this source and frequent reference to Value Line in financial circles indicate that this publication has an influence on investor judgment with regard to expectations for the future.

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There are other sources of earnings growth forecasts. One of these sources is the Institutional Brokers Estimate System ("IBES"). The IBES service provides data on consensus earnings per share forecasts and five-year earnings growth rate estimates. The publisher of IBES has been purchased by Thomson/First Call. The IBES forecasts have been integrated into the First Call consensus growth forecasts. The earnings estimates are obtained from financial analysts at brokerage research departments and from institutions whose securities analysts are projecting earnings for companies in the First Call universe of companies. Other services that tabulate earnings forecasts and publish them are Zacks Investment Research and Market Guide (which is provided over the Internet by Reuters). As with the IBES/First Call forecasts, Zacks and Reuters/Market Guide provide consensus forecasts collected from analysts for most publically traded companies.

In each of these publications, forecasts of earnings per share for the current and subsequent year receive prominent coverage. That is to say, IBES/First Call, Zacks, Reuters/Market Guide, and Value Line show estimates of current-year earnings and projections for the next year. While the DCF model typically focusses upon long-run estimates of growth, stock prices are clearly influenced by current and near-term earnings prospects. Therefore, the near-term earnings per share growth rates should also be factored into a growth rate determination.

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Although forecasts of future performance are investor influencing[2], equity investors may also rely upon the observations of past performance. Investors' expectations of future growth rates may be determined, in part, by an analysis of historical growth rates. It is apparent that any serious investor would advise himself/herself of historical performance prior to taking an investment position in a firm. Earnings per share and dividends per share represent the principal financial variables which influence investor growth expectations.

Other financial variables are sometimes considered in rate case proceedings. For example, a company's internal growth rate, derived from the return rate on book common equity and the related retention ratio, is sometimes considered. This growth rate measure is represented by the Value Line forecast "*B*x*R*" shown on Schedule 7. Internal growth rates are often used as a proxy for book value growth. Unfortunately, this measure of growth is often not reflective of investor-expected growth. This is especially important when there is an indication of a prospective change in dividend payout ratio, earned return on book common equity, change in market-to-book ratios or other fundamental changes in the character of the business. Nevertheless, I have also shown the historical and projected growth rates in book value per share and internal growth rates.

[2]As shown in a National Bureau of Economic Research monograph by John G. Cragg and Burton G. Malkiel, Expectations and the Structure of Share Prices, University of Chicago Press 1982.

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FLOTATION COST ADJUSTMENT

The rate of return on common equity must be high enough to avoid dilution when additional common equity is issued. In this regard, the rate of return on book common equity for public utilities requires recognition of specific factors other than just the market-determined cost of equity. A market price of common stock above book value is necessary to attract future capital on reasonable terms in competition with other seekers of equity capital. Non-regulated companies traditionally have experienced common stock prices consistently above book value. For a public utility to be competitive in the capital markets, similar recognition should be provided, given the understated value of net plant investment which is represented by historical costs much lower than current cost. Moreover, the market value of a public utility stock must be above book value to provide recognition of market pressure, issuance and selling expenses which reduce the net proceeds realized from the sale of new shares of common stock. A market price of stock above book value will maintain the financial integrity of shares previously issued and is necessary to avoid dilution when new shares are offered.

The rate of return on common equity should provide for the underwriting discount and company issuance expenses associated with the sale of new common stock. It is the net proceeds, after payment of these costs that are available to the company, because the issuance costs are paid from the initial offering price to the public. Market pressure occurs when the news of an impending issue of new common shares impacts the pre-offering price of stock. The stock price often declines because of the prospect of an increase in the supply of shares. The difficulty encountered in measuring market pressure relates to the time frame considered, general market

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conditions, and management action during the offering period. An indication of negative market pressure could be the product of the techniques employed to measure pressure and not the prospect of an additional supply of shares related to the new issue.

Even in the situation where a company will not issue common stock during the near term, the flotation cost adjustment factor should be applied to the common equity cost rate. A public utility must be in a competitive capital attraction posture at all times. To deny recognition of a market value of equity above book value would be discriminatory when other comparable companies receive an allowance in this regard. Moreover, to reduce the return rate on common equity by failing to recognize this factor would likewise result in a company being less competitive in the bond market, because a lower resulting overall rate of return would provide less competitive fixed-charge coverage. It cannot be said that a public utility's stock price already considers an allowance for flotation costs. This is because investors in either fixed-income bonds or common stocks seek their required rate of return by reference to alternative investment opportunities, and are not concerned with the issuance costs incurred by a firm borrowing long-term debt or issuing common equity.

Historical data concerning issuance and selling expenses (excluding market pressure) is shown on Schedule 8. To adjust for the cost of raising new common equity capital, the rate of return on common equity should recognize an appropriate multiple in order to allow for a market price of stock above book value. This would provide recognition for flotation costs, which are shown to be 3.2% for public offerings of common stocks by electric companies from 2003 to 2007. Because these costs are not recovered elsewhere, they must be recognized in the rate of

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return. Since I apply the flotation cost to the entire cost of equity, I have only used a modification factor of 1.015 which is applied to the unadjusted DCF-measure of the cost of equity to cover issuance expense. If the modification factor were applied to only a portion of the cost of equity, such as just the dividend yield, then a higher factor would be necessary.

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INTEREST RATES

Interest rates can be viewed in their traditional nominal terms (i.e., the stated rate of interest) and in real terms (i.e., the stated rate of interest less the expected rate of inflation). Absent consideration of inflation, the real rate of interest is determined generally by supply factors which are influenced by investors willingness to forego current consumption (i.e., to save) and demand factors that are influenced by the opportunities to derive income from productive investments. Added to the real rate of interest is compensation required by investors for the inflationary impact of the declining purchasing power of their income received in the future. While interest rates are clearly influenced by the changing annual rate of inflation, it is important to note that the expected rate of inflation that is reflected in current interest rates may be quite different from the prevailing rate of inflation.

Rates of interest also vary by the type of interest bearing instrument. Investors require compensation for the risk associated with the term of the investment and the risk of default. The risk associated with the term of the investment is usually shown by the yield curve, i.e., the difference in rates across maturities. The typical structure is represented by a positive yield curve, which provides progressively higher interest rates as the maturities are lengthened. Flat (i.e., relatively level rates across maturities) or inverted (i.e., higher short-term rates than long-term rates) yield curves occur less frequently.

The risk of default is typically associated with the creditworthiness of the borrower. Differences in interest rates can be traced to the credit quality ratings assigned by the bond rating

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agencies, such as Moody's Investors Service, Inc. and Standard & Poor's Corporation. Obligations of the United States Treasury are usually considered to be free of default risk, and hence reflect only the real rate of interest, compensation for expected inflation, and maturity risk. The Treasury has been issuing inflation-indexed notes, which automatically provide compensation to investors for future inflation, thereby providing a lower current yield on these issues.

Interest Rate Environment

Federal Reserve Board ("Fed") policy actions, which impact directly short-term interest rates also substantially, affect investor sentiment in long-term fixed-income securities markets. In this regard, the Fed has often pursued policies designed to build investor confidence in the fixed-income securities market. Formative Fed policy has had a long history, as exemplified by the historic 1951 Treasury-Federal Reserve Accord, and more recently, deregulation within the financial system, which increased the level and volatility of interest rates. The Fed has indicated that it will follow a monetary policy designed to promote non-inflationary economic growth.

As background to the recent levels of interest rates, history shows that the Open Market Committee of the Federal Reserve board ("FOMC") began a series of moves toward lower short-term interest rates in mid-1990 -- at the outset of the previous recession. Monetary policy was influenced at that time by (i) steps taken to reduce the federal budget deficit, (ii) slowing economic growth, (iii) rising unemployment, and (iv) measures intended to avoid a credit crunch. Thereafter, the Federal government initiated several bold proposals to deal with future

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borrowings by the Treasury. With lower expected federal budget deficits and reduced Treasury borrowings, together with limitations on the supply of new 30-year Treasury bonds, long-term interest rates declined to a twenty-year low, reaching a trough of 5.78% in October 1993.

On February 4, 1994, the FOMC began a series of increases in the Fed Funds rate (i.e., the interest rate on excess overnight bank reserves). The initial increase represented the first rise in short-term interest rates in five years. The series of seven increases doubled the Fed Funds rate to 6%. The increases in short-term interest rates also caused long-term rates to move up, continuing a trend, which began in the fourth quarter of 1993. The cyclical peak in long-term interest rates was reached on November 7 and 14, 1994 when 30-year Treasury bonds attained an 8.16% yield. Thereafter, long-term Treasury bond yields generally declined.

Beginning in mid-February 1996, long-term interest rates moved upward from their previous lows. After initially reaching a level of 6.75% on March 15, 1996, long-term interest rates continued to climb and reached a peak of 7.19% on July 5 and 8, 1996. For the period leading up to the 1996 Presidential election, long-term Treasury bonds generally traded within this range. After the election, interest rates moderated, returning to a level somewhat below the previous trading range. Thereafter, in December 1996, interest rates returned to a range of 6.5% to 7.0%, which existed for much of 1996.

On March 25, 1997, the FOMC decided to tighten monetary conditions through a one-quarter percentage point increase in the Fed Funds rate. This tightening increased the Fed Funds rate to 5.5%. In making this move, the FOMC stated that it was concerned by persistent strength

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of demand in the economy, which it feared would increase the risk of inflationary imbalances that could eventually interfere with the long economic expansion.

In the fourth quarter of 1997, the yields on Treasury bonds began to decline rapidly in response to an increase in demand for Treasury securities caused by a flight to safety triggered by the currency and stock market crisis in Asia. Liquidity provided by the Treasury market makes these bonds an attractive investment in times of crisis. This is because Treasury securities encompass a very large market, which provides ease of trading, and carry a premium for safety. During the fourth quarter of 1997, Treasury bond yields pierced the psychologically important 6% level for the first time since 1993.

Through the first half of 1998, the yields on long-term Treasury bonds fluctuated within a range of about 5.6% to 6.1% reflecting their attractiveness and safety. In the third quarter of 1998, there was further deterioration of investor confidence in global financial markets. This loss of confidence followed the moratorium (i.e., default) by Russia on its sovereign debt and fears associated with problems in Latin America. While not significant to the global economy in the aggregate, the August 17 default by Russia had a significant negative impact on investor confidence, following earlier discontent surrounding the crisis in Asia. These events subsequently led to a general pull back of risk-taking as displayed by banks growing reluctance to lend, worries of an expanding credit crunch, lower stock prices, and higher yields on bonds of riskier companies. These events contributed to the failure of the hedge fund, Long-Term Capital Management.

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In response to these events, the FOMC cut the Fed Funds rate just prior to the mid-term Congressional elections. The FOMC's action was based upon concerns over how increasing weakness in foreign economies would affect the U.S. economy. As recently as July 1998, the FOMC had been more concerned about fighting inflation than the state of the economy. The initial rate cut was the first of three reductions by the FOMC. Thereafter, the yield on long-term Treasury bonds reached a 30-year low of 4.70% on October 5, 1998. Long-term Treasury yields below 5% had not been seen since 1967. Unlike the first rate cut that was widely anticipated, the second rate reduction by the FOMC was a surprise to the markets. A third reduction in short-term interest rates occurred in November 1998 when the FOMC reduced the Fed Funds rate to 4.75%.

All of these events prompted an increase in the prices for Treasury bonds, which lead to the low yields described above. Another factor that contributed to the decline in yields on long-term Treasury bonds was a reduction in the supply of new Treasury issues coming to market due to the Federal budget surplus -- the first in nearly 30 years. The dollar amount of Treasury bonds being issued declined by 30% in two years thus resulting in higher prices and lower yields. In addition, rumors of some struggling hedge funds unwinding their positions further added to the gains in Treasury bond prices.

The financial crisis that spread from Asia to Russia and to Latin America pushed nervous investors from stocks into Treasury bonds, thus increasing demand for bonds, just when supply was shrinking. There was also a move from corporate bonds to Treasury bonds to take

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advantage of appreciation in the Treasury market. This resulted in a certain amount of exuberance for Treasury bond investments that formerly was reserved for the stock market. Moreover, yields in the fourth quarter of 1998 became extremely volatile as shown by Treasury yields that fell from 5.10% on September 29 to 4.70 percent on October 5, and thereafter returned to 5.10% on October 13. A decline and rebound of 40 basis points in Treasury yields in a two-week time frame is remarkable.

Beginning in mid-1999, the FOMC raised interest rates on six occasions reversing its actions in the fall of 1998. On June 30, 1999, August 24, 1999, November 16, 1999, February 2, 2000, March 21, 2000, and May 16, 2000, the FOMC raised the Fed Funds rate to 6.50%. This brought the Fed Funds rate to its highest level since 1991, and was 175 basis points higher than the level that occurred at the height of the Asian currency and stock market crisis. At the time, these actions were taken in response to more normally functioning financial markets, tight labor markets, and a reversal of the monetary ease that was required earlier in response to the global financial market turmoil.

As the year 2000 drew to a close, economic activity slowed and consumer confidence began to weaken. In two steps at the beginning and at the end of January 2001, the FOMC reduced the Fed Funds rate by one percentage point. These actions brought the Fed Funds rate to 5.50%. The FOMC described its actions as "a rapid and forceful response of monetary policy" to eroding consumer and business confidence exemplified by weaker retail sales and business spending on capital equipment and cut backs in manufacturing production. Subsequently, on

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March 20, 2001, April 18, 2001, May 15, 2001, June 27, 2001, and August 21, 2001, the FOMC lowered the Fed Funds in steps consisting of three 50 basis points decrements followed by two 25 basis points decrements. These actions took the Fed Funds rate to 3.50%. The FOMC observed on August 21, 2001:

> "Household demand has been sustained, but business profits and capital spending continue to weaken and growth abroad is slowing, weighing on the U.S. economy. The associated easing of pressures on labor and product markets is expected to keep inflation contained.
>
> Although long-term prospects for productivity growth and the economy remain favorable, the Committee continues to believe that against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the risks are weighted mainly toward conditions that may generate economic weakness in the foreseeable future."

After the terrorist attack on September 11, 2001, the FOMC made two additional 50 basis points reductions in the Fed Funds rate. The first reduction occurred on September 17, 2001 and followed the four-day closure of the financial markets following the terrorist attacks. The second reduction occurred at the October 2 meeting of the FOMC where it observed:

> "The terrorist attacks have significantly heightened uncertainty in an economy that was already weak. Business and household spending as a consequence are being further damped. Nonetheless, the long-term prospects for productivity growth and the economy remain favorable and should become evident once the unusual forces restraining demand abate."

Afterward, the FOMC reduced the Fed Funds rate by 50 basis points on November 6, 2001 and by 25 basis points on December 11, 2001. In total, short-term interest rates were reduced by the

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FOMC eleven (11) times during the year 2001. These actions cut the Fed Funds rate by 4.75% and resulted in 1.75% for the Fed Funds rate.

In an attempt to deal with weakening fundamentals in the economy recovering from the recession that began in March 2001, the FOMC provided a psychologically important one-half percentage point reduction in the federal funds rate. The rate cut was twice as large as the market expected, and brought the fed funds rate to 1.25% on November 6, 2002. The FOMC stated that:

> "The Committee continues to believe that an accommodative stance of monetary policy, coupled with still-robust underlying growth in productivity, is providing important ongoing support to economic activity. However, incoming economic data have tended to confirm that greater uncertainty, in part attributable to heightened geopolitical risks, is currently inhibiting spending, production, and employment. Inflation and inflation expectations remain well contained.
>
> In these circumstances, the Committee believes that today's additional monetary easing should prove helpful as the economy works its way through this current soft spot. With this action, the Committee believes that, against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the risks are balanced with respect to the prospects for both goals in the foreseeable future."

As 2003 unfolded, there was a continuing expectation of lower yields on Treasury securities. In fact, the yield on ten-year Treasury notes reached a 45-year low near the end of the second quarter of 2003. For long-term Treasury bonds, those yields culminated with a 4.24% yield on June 13, 2003. Soon thereafter, the FOMC reduced the Fed Funds rate by 25 basis

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points on June 25, 2003. In announcing its action, the FOMC stated:

> "The Committee continues to believe that an accommodative stance of monetary policy, coupled with still robust underlying growth in productivity, is providing important ongoing support to economic activity. Recent signs point to a firming in spending, markedly improved financial conditions, and labor and product markets that are stabilizing. The economy, nonetheless, has yet to exhibit sustainable growth. With inflationary expectations subdued, the Committee judged that a slightly more expansive monetary policy would add further support for an economy which it expects to improve over time."

Thereafter, intermediate and long-term Treasury yields moved marketedly higher. Higher yields on long-term Treasury bonds, which exceeded 5.00% can be traced to: (i) the market's disappointment that the Fed Funds rate was not reduced below 1.00%, (ii) an indication that the Fed will not use unconventional methods for implementing monetary policy, (iii) growing confidence in a strengthening economy, and (iv) a Federal budget deficit that is projected to be $455 billion in 2003 (reported, subsequently, the actually deficit was $374 billion) and $475 billion in 2004 (revised subsequently, the estimated deficit is $500 billion in 2004). All these factors significantly changed the seniment in the bond market.

For the remainder of 2003, the FOMC continued with its balanced monetary policy, thereby retaining the 1% Fed Funds rate. However, in 2004, the FOMC initiated a policy of moving toward a more neutral Fed Funds rate (i.e., removing the bias of abnormal low rates). On June 30, 2004, August 10, 2004, September 21, 2004, November 10, 2004, December 14, 2004, February 2, 2005, March 22, 2005, May 3, 2005, June 30, 2005, August 9, 2005, September 20, 2005, November 1, 2005, December 13, 2005, January 31, 2006, March 28, 2006,

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May 10, 2006, and June 29, 2006, the FOMC increased the Fed Funds rate in seventeen 25 basis point increments. These policy actions are widely interpreted as part of the process of moving toward a more neutral range for the Fed Funds rate.

Just after the FOMC meeting on August 7, 2007, where the FOMC decided to retain a 5.25% Fed Funds rate, turmoil in the credit markets prompted central banks throughout the world to inject over $325 billion of reserves into the banking system over a three-day period in reaction to a credit crunch. Problems had been developing earlier in 2007, beginning in the market for asset-backed securities linked to subprime mortgages. Valuation uncertainties for these securities caused liquidity concerns for hedge funds, investment banks, and financial institutions. The market for commercial paper, the most liquid part of the credit markets for non-Treasury securities, was also affected. In response to the market turmoil, the FOMC issued the following statement, the first of its type since after the September 11, 2001 terrorists' attack.

> "The Federal Reserve is providing liquidity to facilitate the orderly functioning of financial markets.
>
> The Federal Reserve will provide reserves as necessary through open market operations to promote trading in the federal funds market at rates close to the Federal Open Market Committee's target rate of 5-1/4 percent. In current circumstances, depository institutions may experience unusual funding needs because of dislocations in money and credit markets. As always, the discount window is available as a source of funding."

Then, one week after its initial announcement, the FOMC made a surprise reduction of 50 basis points in the discount rate to narrow the spread between this rate and the target Fed Funds rate. At the same time, the FOMC made the following statement:

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> "Financial market conditions have deteriorated, and tighter credit conditions and increased uncertainty have the potential to restrain economic growth going forward. In these circumstances, although recent data suggest that the economy has continued to expand at a moderate pace, the Federal Open Market Committee judges that the downside risks to growth have increased appreciably. The Committee is monitoring the situation and is prepared to act as needed to mitigate the adverse effects on the economy arising from the disruptions in financial markets."

Thereafter, at its regularly scheduled meeting on September 18, 2007, the FOMC reduced the target Fed Funds rate to 4.75% and the discount rate was reduced to 5.25% in an effort to forestall the adverse effects of the financial market turmoil on the economy generally. Further reductions of 25 basis points occurred at the next two FOMC meetings on October 31, 2007 and on December 11, 2007. The December 11, 2007 FOMC statement indicated that:

> Incoming information suggests that economic growth is slowing, reflecting the intensification of the housing correction and some softening in business and consumer spending. Moreover, strains in financial markets have increased in recent weeks. Today's action, combined with the policy actions taken earlier, should help promote moderate growth over time.
>
> Readings on core inflation have improved modestly this year, but elevated energy and commodity prices, among other factors, may put upward pressure on inflation. In this context, the Committee judges that some inflation risks remain, and it will continue to monitor inflation developments carefully.
>
> Recent developments, including the deterioration in financial market conditions, have increased the uncertainty surrounding the outlook for economic growth and inflation. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act as needed to foster price stability and sustainable economic growth.

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With these actions, the Fed Funds rate and the discount rate closed the calendar year 2007 at 4.25% and 4.75%, respectively.

In 2008, the FOMC again acted decisively in response to further deterioration of credit conditions and perceived weakness in the economy. Acting prior to its first regularly scheduled meeting in 2008, the FOMC reduced the fed funds target by 75 basis points to 3.50% and the discount rate was reduced by a corresponding amount to 4.00%. Actions by the FOMC between meetings are unusual occurrences in recent years, thereby signifying the urgency that the FOMC saw in taking immediate action on monetary policy. Then on January 30, 2008, the fed funds target rate and discount rate were further reduced by 50 basis points, bringing those rates to 3.00% and 3.50%, respectively. Credit market turmoil continued, and after the collapse of a major investment bank (The Bear Stearn Companies), the FOMC stated:

> The Federal Reserve on Sunday announced two initiatives designed to bolster market liquidity and promote orderly market functioning. Liquid, well-functioning markets are essential for the promotion of economic growth.
>
> First, the Federal Reserve Board voted unanimously to authorize the Federal Reserve Bank of New York to create a lending facility to improve the ability of primary dealers to provide financing to participants in securitization markets. This facility will be available for business on Monday, March 17. It will be in place for at least six months and may be extended as conditions warrant. Credit extended to primary dealers under this facility may be collateralized by a broad range of investment-grade debt securities. The interest rate charged on such credit will be the same as the primary credit rate, or discount rate, at the Federal Reserve Bank of New York.
>
> Second, the Federal Reserve Board unanimously approved a request by the Federal Reserve Bank of New York to decrease the

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> primary credit rate from 3-1/2 percent to 3-1/4 percent, effective immediately. This step lowers the spread of the primary credit rate over the Federal Open Market Committee's target federal funds rate to 1/4 percentage point. The Board also approved an increase in the maximum maturity of primary credit loans to 90 days from 30 days.
>
> The Board also approved the financing arrangement announced by JPMorgan Chase & Co. and The Bear Stearns Companies Inc.

Then on March 18, 2008, the FOMC reduced the fed funds rate to 2.25% and the discount rate to 2.50%. Afterward on April 30, 2008, the FOMC further reduces the fed funds rate to 2.00% and the discount rate to 2.25%. At its June 25, 2008 meeting, the FOMC decided to take no further action on the fed funds rate and the discount rate. The FOMC stated that:

> Recent information indicates that economic activity remains weak. Household and business spending has been subdued and labor markets have softened further. Financial markets remain under considerable stress, and tight credit conditions and the deepening housing contraction are likely to weigh on economic growth over the next few quarters.
>
> Although readings on core inflation have improved somewhat, energy and other commodity prices have increased, and some indicators of inflation expectations have risen in recent months. The Committee expects inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, uncertainty about the inflation outlook remains high. It will be necessary to continue to monitor inflation developments carefully.
>
> The substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time and to mitigate risks to economic activity. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

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Public Utility Bond Yields

The Risk Premium analysis of the cost of equity is represented by the combination of a firm's borrowing rate for long-term debt capital plus a premium that is required to reflect the additional risk associated with the equity of a firm as explained in Appendix G. Due to the senior nature of the long-term debt of a firm, its cost is lower than the cost of equity due to the prior claim, which lenders have on the earnings, and assets of a corporation.

As a generalization, all interest rates track to varying degrees of the benchmark yields established by the market for Treasury securities. Public utility bond yields usually reflect the underlying Treasury yield associated with a given maturity plus a spread to reflect the specific credit quality of the issuing public utility. Market sentiment can also have an influence on the spreads as described below. The spread in the yields on public utility bonds and Treasury bonds varies with market conditions, as does the relative level of interest rates at varying maturities shown by the yield curve.

Pages 1 and 2 of Schedule 9 provide the recent history of long-term public utility bond yields for the rating categories of Aa, A and Baa (no yields are shown for Aaa rated public utility bonds because this index has been discontinued). The top four rating categories of Aaa, Aa, A, and Baa are known as "investment grades" and are generally regarded as eligible for bank investments under commercial banking regulations. These investment grades are distinguished from "junk" bonds, which have ratings of Ba and below.

A relatively long history of the spread between the yields on long-term A-rated public

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utility bonds and 20-year Treasury bonds is shown on page 3 of Schedule 9. There, it is shown that those spreads were about one percent during the years 1994 through 1997. With the aversion to risk and flight to quality described earlier, a significant widening of the spread in the yields between corporate (e.g., public utility) and Treasury bonds developed in 1998, after an initial widening of the spread that began in the fourth quarter of 1997. The significant widening of spreads in 1998 was unexpected by some technically savvy investors, as shown by the debacle at the Long-Term Capital Management hedge fund. When Russia defaulted its debt on August 17, some investors had to cover short positions when Treasury prices spiked upward. Short covering by investors that guessed wrong on the relationship between corporate and Treasury bonds also contributed to the run-up in Treasury bond prices by increasing the demand for them. This helped to contribute to a widening of the spreads between corporate and Treasury bonds.

As shown on page 3 of Schedule 9, the spread in yields between A-rated public utility bonds and 20-year Treasury bonds was about one percentage point prior to 1998, 1.32% in 1998, 1.42% in 1999, 2.01% in 2000, 2.13% in 2001, 1.94% in 2002, 1.62% in 2003, 1.12% in 2004, 1.01% in 2005, 1.08% in 2006, and 1.16% in 2007. As shown by the monthly data presented on pages 4 and 5 of Schedule 9, the interest rate spread between the yields on 20-year Treasury bonds and A-rated public utility bonds was 1.48 percentage points for the twelve-months ended May 2008. For the six- and three-month periods ending May 2008, the yield spread was 1.73% and 1.79%, respectively. Beginning in August 2007, spreads widened significantly with the development of the credit crunch.

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Risk-Free Rate of Return in the CAPM

Regarding the risk-free rate of return (see Appendix H), pages 2 and 3 of Schedule 11 provide the yields on the broad spectrum of Treasury Notes and Bonds. Some practitioners of the CAPM would advocate the use of short-term treasury yields (and some would argue for the yields on 91-day Treasury Bills). Other advocates of the CAPM would advocate the use of longer-term treasury yields as the best measure of a risk-free rate of return. As Ibbotson has indicated:

> The Cost of Capital in a Regulatory Environment. When discounting cash flows projected over a long period, it is necessary to discount them by a long-term cost of capital. Additionally, regulatory processes for setting rates often specify or suggest that the desired rate of return for a regulated firm is that which would allow the firm to attract and retain debt and equity capital over the long term. Thus, the long-term cost of capital is typically the appropriate cost of capital to use in regulated ratesetting. (Stocks, Bonds, Bills and Inflation - 1992 Yearbook, pages 118-119)

As indicated above, long-term Treasury bond yields represent the correct measure of the risk-free rate of return in the traditional CAPM. Very short term yields on Treasury bills should be avoided for several reasons. First, rates should be set on the basis of financial conditions that will exist during the effective period of the proposed rates. Second, 91-day Treasury bill yields are more volatile than longer-term yields and are greatly influenced by FOMC monetary policy, political, and economic situations. Moreover, Treasury bill yields have been shown to be empirically inadequate for the CAPM. Some advocates of the theory would argue that the risk-free rate of return in the CAPM should be derived from quality long-term corporate bonds. To

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take a balanced approach to the risk-free rate of return, the yield on long-term Treasury bonds has been used for this purpose.

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RISK PREMIUM ANALYSIS

The cost of equity requires recognition of the risk premium required by common equities over long-term corporate bond yields. In the case of senior capital, a company contracts for the use of long-term debt capital at a stated coupon rate for a specific period of time and in the case of preferred stock capital at a stated dividend rate, usually with provision for redemption through sinking fund requirements. In the case of senior capital, the cost rate is known with a high degree of certainty because the payment for use of this capital is a contractual obligation, and the future schedule of payments is known. In essence, the investor-expected cost of senior capital is equal to the realized return over the entire term of the issue, absent default.

The cost of equity, on the other hand, is not fixed, but rather varies with investor perception of the risk associated with the common stock. Because no precise measurement exists as to the cost of equity, informed judgment must be exercised through a study of various market factors, which motivate investors to purchase common stock. In the case of common equity, the realized return rate may vary significantly from the expected cost rate due to the uncertainty associated with earnings on common equity. This uncertainty highlights the added risk of a common equity investment.

As one would expect from traditional risk and return relationships, the cost of equity is affected by expected interest rates. As noted in Appendix F, yields on long-term corporate bonds traditionally consist of a real rate of return without regard to inflation, an increment to reflect

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investor perception of expected future inflation, the investment horizon shown by the term of the issue until maturity, and the credit risk associated with each rating category.

The Risk Premium approach recognizes the required compensation for the more risky common equity over the less risky secured debt position of a lender. The cost of equity stated in terms of the familiar risk premium approach is:

$$k=i+RP$$

where, the cost of equity *("k")* is equal to the interest rate on long-term corporate debt *("i")*, plus an equity risk premium *("RP")* which represents the additional compensation for the riskier common equity.

Equity Risk Premium

The equity risk premium is determined as the difference in the rate of return on debt capital and the rate of return on common equity. Because the common equity holder has only a residual claim on earnings and assets, there is no assurance that achieved returns on common equities will equal expected returns. This is quite different from returns on bonds, where the investor realizes the expected return during the entire holding period, absent default. It is for this reason that common equities are always more risky than senior debt securities. There are investment strategies available to bond portfolio managers that immunize bond returns against fluctuations in interest rates because bonds are redeemed through sinking funds or at maturity, whereas no such redemption is mandated for public utility common equities.

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It is well recognized that the expected return on more risky investments will exceed the required yield on less risky investments. Neither the possibility of default on a bond nor the maturity risk detracts from the risk analysis, because the common equity risk rate differential (i.e., the investor-required risk premium) is always greater than the return components on a bond. It should also be noted that the investment horizon is typically long-run for both corporate debt and equity, and that the risk of default (i.e., corporate bankruptcy) is a concern to both debt and equity investors. Thus, the required yield on a bond provides a benchmark or starting point with which to track and measure the cost rate of common equity capital. There is no need to segment the bond yield according to its components, because it is the total return demanded by investors that is important for determining the risk rate differential for common equity. This is because the complete bond yield provides the basis to determine the differential, and as such, consistency requires that the computed differential must be applied to the complete bond yield when applying the risk premium approach. To apply the risk rate differential to a partial bond yield would result in a misspecification of the cost of equity because the computed differential was initially determined by reference to the entire bond return.

The risk rate differential between the cost of equity and the yield on long-term corporate bonds can be determined by reference to a comparison of holding period returns (here defined as one year) computed over long time spans. This analysis assumes that over long periods of time investors' expectations are on average consistent with rates of return actually achieved. Accordingly, historical holding period returns must not be analyzed over an unduly short period

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because near-term realized results may not have fulfilled investors' expectations. Moreover, specific past period results may not be representative of investment fundamentals expected for the future. This is especially apparent when the holding period returns include negative returns, which are not representative of either investor requirements of the past or investor expectations for the future. The short-run phenomenon of unexpected returns (either positive or negative) demonstrates that an unduly short historical period would not adequately support a risk premium analysis. It is important to distinguish between investors' motivation to invest, which encompass positive return expectations, and the knowledge that losses can occur. No rational investor would forego payment for the use of capital, or expect loss of principal, as a basis for investing. Investors will hold cash rather than invest with the expectation of a loss.

Within these constraints, page 1 of Schedule 10 provides the historical holding period returns for the S&P Public Utility Index which has been independently computed and the historical holding period returns for the S&P Composite Index which have been reported in Stocks, Bonds, Bills and Inflation published by Ibbotson & Associates. The tabulation begins with 1928 because January 1928 is the earliest monthly dividend yield for the S&P Public Utility Index. I have considered all reliable data for this study to avoid the introduction of a particular bias to the results. The measurement of the common equity return rate differential is based upon actual capital market performance using realized results. As a consequence, the underlying data for this risk premium approach can be analyzed with a high degree of precision. Informed

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professional judgment is required only to interpret the results of this study, but not to quantify the component variables.

The risk rate differentials for all equities, as measured by the S&P Composite, are established by reference to long-term corporate bonds. For public utilities, the risk rate differentials are computed with the S&P Public Utilities as compared with public utility bonds.

The measurement procedure used to identify the risk rate differentials consisted of arithmetic means, geometric means, and medians for each series. Measures of the central tendency of the results from the historical periods provide the best indication of representative rates of return. In regulated ratesetting, the correct measure of the equity risk premium is the arithmetic mean because a utility must expect to earn its cost of capital in each year in order to provide investors with their long-term expectations. In other contexts, such as pension determinations, compound rates of return, as shown by the geometric means, may be appropriate. The median returns are also appropriate in ratesetting because they are a measure of the central tendency of a single period rate of return. Median values have also been considered in this analysis because they provide a return, which divides the entire series of annual returns in half, and are representative of a return that symbolizes, in a meaningful way, the central tendency of all annual returns contained within the analysis period. Medians are regularly included in many investor-influencing publications.

As previously noted, the arithmetic mean provides the appropriate point estimate of the risk premium. As further explained in Appendix H, the long-term cost of capital in rate cases

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requires the use of arithmetic means. To supplement my analysis, I have also used the rates of return taken from the geometric mean and median for each series to provide the bounds of the range to measure the risk rate differentials. While the use of the geometric mean would be inappropriate for CAPM purposes due to the specification of that model, it can provide a limit of the bounds for the Risk Premium approach that does not contain the single-period limitation. This further analysis shows that when selecting the midpoint from a range established with the geometric means and medians, the arithmetic mean is indeed a reasonable measure for the long-term cost of capital. For the years 1928 through 2007, the risk premiums for each class of equity are:

	S&P Composite	S&P Public Utilities
Arithmetic Mean	5.82%	5.52%
Geometric Mean	4.23%	3.47%
Median	9.27%	7.50%
Midpoint of Range	6.75%	5.49%
Average of Arithmetic Mean and Midpoint of Range	6.29%	5.51%

The empirical evidence suggests that the common equity risk premium is higher for the S&P Composite Index compared to the S&P Public Utilities.

If, however, specific historical periods were also analyzed in order to match more closely historical fundamentals with current expectations, the results provided on page 2 of Schedule 10 should also be considered. One of these sub-periods included the 56-year period, 1952-2007.

APPENDIX G TO DIRECT TESTIMONY OF PAUL R. MOUL

These years follow the historic 1951 Treasury-Federal Reserve Accord, which affected monetary policy and the market for government securities.

A further investigation was undertaken to determine whether realignment has taken place subsequent to the historic 1973 Arab Oil embargo and during the deregulation of the financial markets. In each case, the public utility risk premiums were computed by using the arithmetic mean, and the geometric means and medians to establish the range shown by those values. The time periods covering the more recent periods 1974 through 2007 and 1979 through 2007 contain events subsequent to the initial oil shock and the advent of monetarism as Fed policy, respectively. For the 56-year, 34-year and 29-year periods, the public utility risk premiums were 6.58%, 6.08%, and 6.37% respectively, as shown by the average of the specific point-estimates and the midpoint of the ranges provided on page 2 of Schedule 10.

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CAPITAL ASSET PRICING MODEL

Modern portfolio theory provides a theoretical explanation of expected returns on portfolios of securities. The Capital Asset Pricing Model ("CAPM") attempts to describe the way prices of individual securities are determined in efficient markets where information is freely available and is reflected instantaneously in security prices. The CAPM states that the expected rate of return on a security is determined by a risk-free rate of return plus a risk premium, which is proportional to the non-diversifiable (or systematic) risk of a security.

The CAPM theory has several unique assumptions that are not common to most other methods used to measure the cost of equity. As with other market-based approaches, the CAPM is an expectational concept. There has been significant academic research conducted that found that the empirical market line, based upon historical data, has a less steep slope and higher intercept than the theoretical market line of the CAPM. For equities with a beta less than 1.0, such as utility common stocks, the CAPM theoretical market line will underestimate the realistic expectation of investors in comparison with the empirical market line, which shows that the CAPM may potentially misspecify investors' required return.

The CAPM considers changing market fundamentals in a portfolio context. The balance of the investment risk, or that characterized as unsystematic, must be diversified. Some argue that diversifiable (unsystematic) risk is unimportant to investors. But this contention is not completely justified because the business and financial risk of an individual company, including regulatory risk, are widely discussed within the investment community and therefore influence

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investors in regulated firms. In addition, I note that the CAPM assumes that through portfolio diversification, investors will minimize the effect of the unsystematic (diversifiable) component of investment risk. Because it is not known whether the average investor holds a well-diversified portfolio, the CAPM must also be used with other models of the cost of equity.

To apply the traditional CAPM theory, three inputs are required: the beta coefficient *("β")*, a risk-free rate of return *("Rf")*, and a market premium *("Rm - Rf")*. The cost of equity stated in terms of the CAPM is:

$$k = Rf + \beta\,(Rm - Rf)$$

As previously indicated, it is important to recognize that the academic research has shown that the security market line was flatter than that predicted by the CAPM theory and it had a higher intercept than the risk-free rate. These tests indicated that for portfolios with betas less than 1.0, the traditional CAPM would understate the return for such stocks. Likewise, for portfolios with betas above 1.0, these companies had lower returns than indicated by the traditional CAPM theory. Once again, CAPM assumes that through portfolio diversification investors will minimize the effect of the unsystematic (diversifiable) component of investment risk. Therefore, the CAPM must also be used with other models of the cost of equity, especially when it is not known whether the average public utility investor holds a well-diversified portfolio.

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Beta

The beta coefficient is a statistical measure, which attempts to identify the non-diversifiable (systematic) risk of an individual security and measures the sensitivity of rates of return on a particular security with general market movements. Under the CAPM theory, a security that has a beta of 1.0 should theoretically provide a rate of return equal to the return rate provided by the market. When employing stock price changes in the derivation of beta, a stock with a beta of 1.0 should exhibit a movement in price, which would track the movements in the overall market prices of stocks. Hence, if a particular investment has a beta of 1.0, a one percent increase in the return on the market will result, on average, in a one percent increase in the return on the particular investment. An investment, which has a beta less than 1.0, is considered to be less risky than the market.

The beta coefficient ("β"), the one input in the CAPM application, which specifically applies to an individual firm, is derived from a statistical application, which regresses the returns on an individual security (dependent variable) with the returns on the market as a whole (independent variable). The beta coefficients for utility companies typically describe a small proportion of the total investment risk because the coefficients of determination (R^2) are low.

Page 1 of Schedule 11 provides the betas published by Value Line. By way of explanation, the Value Line beta coefficient is derived from a "straight regression" based upon the percentage change in the weekly price of common stock and the percentage change weekly of the New York Stock Exchange Composite average using a five-year period. The raw

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historical beta is adjusted by Value Line for the measurement effect resulting in overestimates in high beta stocks and underestimates in low beta stocks. Value Line then rounds its betas to the nearest .05 increment. Value Line does not consider dividends in the computation of its betas.

Market Premium

The final element necessary to apply the CAPM is the market premium. The market premium by definition is the rate of return on the total market less the risk-free rate of return *("Rm - Rf")*. In this regard, the market premium in the CAPM has been calculated from the total return on the market of equities using forecast and historical data. The future market return is established with forecasts by Value Line using estimated dividend yields and capital appreciation potential.

With regard to the forecast data, I have relied upon the Value Line forecasts of capital appreciation and the dividend yield on the 1,700 stocks in the Value Line Survey. According to the June 6, 2008 edition of The Value Line Investment Survey Summary and Index, (see page 5 of Schedule 11) the total return on the universe of Value Line equities is:

	Dividend Yield	+	Median Appreciation Potential	=	Median Total Return
As of June 6, 2008	2.1%	+	14.19%[1]	=	16.29%

The tabulation shown above provides the dividend yield and capital gains yield of the companies followed by Value Line. Another measure of the total market return is provided by the DCF

[1]The estimated median appreciation potential is forecast to be 70% for 3 to 5 years hence. The annual capital gains yield at the midpoint of the forecast period is 13.34% (i.e., $1.70^{.25}$ - 1).

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return on the S&P 500 Composite index. As shown below, that return is 13.45%.

DCF Result for the S&P 500 Composite

D/P	(	1+.5g	)	+	g	=	k
2.04%	(	1.0565	)	+	11.29%	=	13.45%

where:	Price (P)	at	31-May-2008	=	1400.38
	Dividend (D)	for	1st Qtr. '08	=	7.13
	Dividend (D)		annualized	=	28.52
	Growth (g)		First Call EpS	=	11.29%

Using these indicators, the total market return is 14.87% (16.29% + 13.45% = 29.74% ÷ 2) using both the Value Line and S&P derived returns. With the 14.87% forecast market return and the 4.50% risk-free rate of return, a 10.37% (14.87% - 4.50%) market premium would be indicated using forecast market data.

With regard to the historical data, I provided the rates of return from long-term historical time periods that have been widely circulated among the investment and academic community over the past several years, as shown on page 6 of Schedule 11. These data are published by Ibbotson Associates in its Stocks, Bonds, Bills and Inflation ("SBBI"). From the data provided on page 6 of Schedule 11, I calculate a market premium using the common stock arithmetic mean returns of 12.3% less government bond arithmetic mean returns of 5.8%. For the period 1926-2007, the market premium was 6.5% (12.3% - 5.8%). I should note that the arithmetic mean must be used in the CAPM because it is a single period model. It is further confirmed by Ibbotson who has indicated:

Arithmetic Versus Geometric Differences

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> For use as the expected equity risk premium in the CAPM, the *arithmetic* or *simple difference* of the *arithmetic* means of stock market returns and riskless rates is the relevant number. This is because the CAPM is an additive model where the cost of capital is the sum of its parts. Therefore, the CAPM expected equity risk premium must be derived by arithmetic, *not geometric*, subtraction.
>
> *Arithmetic Versus Geometric Means*
> The expected equity risk premium should always be calculated using the arithmetic mean. The arithmetic mean is the rate of return which, when compounded over multiple periods, gives the mean of the probability distribution of ending wealth values. This makes the arithmetic mean return appropriate for computing the cost of capital. The discount rate that equates expected (mean) future values with the present value of an investment is that investment's cost of capital. The logic of using the discount rate as the cost of capital is reinforced by noting that investors will discount their (mean) ending wealth values from an investment back to the present using the arithmetic mean, for the reason given above. They will therefore require such an expected (mean) return prospectively (that is, in the present looking toward the future) to commit their capital to the investment. (Stocks, Bonds, Bills and Inflation - 1996 Yearbook, pages 153-154)

For the CAPM, a market premium of 8.44% (6.5% + 10.37% = 16.87% ÷ 2) would be reasonable which is the average of the 6.5% using historical data and a market premium of 10.37% using forecasts.

APPENDIX I TO DIRECT TESTIMONY OF PAUL R. MOUL

COMPARABLE EARNINGS APPROACH

Value Line's analysis of the companies that it follows includes a wide range of financial and market variables, including nine items that provide ratings for each company. From these nine items, one category has been removed dealing with industry performance because, under approach employed, the particular business type is not significant. In addition, two categories have been ignored that deal with estimates of current earnings and dividends because they are not useful for comparative purposes. The remaining six categories provide relevant measures to establish comparability. The definitions for each of the six criteria (from the Value Line Investment Survey - Subscriber Guide) follow:

Timeliness Rank

> The rank for a stock's probable relative market performance in the year ahead. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the year-ahead market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next 12 months. Stocks ranked 3 (Average) will probably advance or decline with the market in the year ahead. Investors should try to limit purchases to stocks ranked 1 (Highest) or 2 (Above Average) for Timeliness.

Safety Rank

> A measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which Beta is good risk measure). Safety is based on the stability of price, which includes sensitivity to the market (see Beta) as well as the stock's inherent volatility, adjusted for trend and other factors including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative

APPENDIX I TO DIRECT TESTIMONY OF PAUL R. MOUL

investors should try to limit purchases to equities ranked 1 (Highest) or 2 (Above Average) for Safety.

Financial Strength

The financial strength of each of the more than 1,600 companies in the VS II data base is rated relative to all the others. The ratings range from A++ to C in nine steps. (For screening purposes, think of an A rating as "greater than" a B). Companies that have the best relative financial strength are given an A++ rating, indicating ability to weather hard times better than the vast majority of other companies. Those who don't quite merit the top rating are given an A+ grade, and so on. A rating as low as C++ is considered satisfactory. A rating of C+ is well below average, and C is reserved for companies with very serious financial problems. The ratings are based upon a computer analysis of a number of key variables that determine (a) financial leverage, (b) business risk, and (c) company size, plus the judgment of Value Line's analysts and senior editors regarding factors that cannot be quantified across-the-board for companies. The primary variables that are indexed and studied include equity coverage of debt, equity coverage of intangibles, "quick ratio", accounting methods, variability of return, fixed charge coverage, stock price stability, and company size.

Price Stability Index

An index based upon a ranking of the weekly percent changes in the price of the stock over the last five years. The lower the standard deviation of the changes, the more stable the stock. Stocks ranking in the top 5% (lowest standard deviations) carry a Price Stability Index of 100; the next 5%, 95; and so on down to 5. One standard deviation is the range around the average weekly percent change in the price that encompasses about two thirds of all the weekly percent change figures over the last five years. When the range is wide, the standard deviation is high and the stock's Price Stability Index is low.

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Beta

A measure of the sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Average. A Beta of 1.50 indicates that a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Average. Use Beta to measure the stock market risk inherent in any diversified portfolio of, say, 15 or more companies. Otherwise, use the Safety Rank, which measures total risk inherent in an equity, including that portion attributable to market fluctuations. Beta is derived from a least squares regression analysis between weekly percent changes in the price of a stock and weekly percent changes in the NYSE Average over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are periodically adjusted for their long-term tendency to regress toward 1.00.

Technical Rank

A prediction of relative price movement, primarily over the next three to six months. It is a function of price action relative to all stocks followed by Value Line. Stocks ranked 1 (Highest) or 2 (Above Average) are likely to outpace the market. Those ranked 4 (Below Average) or 5 (Lowest) are not expected to outperform most stocks over the next six months. Stocks ranked 3 (Average) will probably advance or decline with the market. Investors should use the Technical and Timeliness Ranks as complements to one another.

NORTHERN INDIANA PUBLIC SERVICE COMPANY

IURC CAUSE NO. 43526

FINANCIAL EXHIBIT

TO ACCOMPANY THE

DIRECT TESTIMONY

OF

PAUL R. MOUL

NORTHERN INDIANA PUBLIC SERVICE COMPANY

Index of Schedules

Northern Indiana Public Service Company
Rate of Return Applicable to an Original Cost Rate Base
For the Test Year Ending December 31, 2007, including Sugar Creek

Investor Provided Capital	Ratios	Cost Rate	Weighted Cost Rate
Long-Term Debt	40.08%	6.55%	2.63%
Common Equity	59.92%	12.00%	7.19%
Total	100.00%		9.82%

Indicated levels of fixed charge coverage assuming that the Company could actually achieve its overall cost of capital:

Pre-tax coverage of interest expense based upon a 40.525% composite federal and state income tax rate (14.72% ÷ 2.63%)	5.60 x
Post-tax coverage of interest expense (9.82% ÷ 2.63%)	3.73 x

For Ratesetting Purposes	Ratios	Cost Rate	Weighted Cost Rate
Long-Term Debt	33.52%	6.55%	2.20%
Common Equity	50.11%	12.00%	6.01%
Customer Deposits	2.08%	6.00%	0.12%
Cost-free Capital	13.30%	0.00%	0.00%
JDITC	0.99%	9.82%	0.10%
Total	100.00%		8.43%

Northern Indiana Public Service Company
Capitalization and Financial Statistics
2003-2007, Inclusive

	2007	2006	2005	2004	2003	Average
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	$ 2,187.4	$ 2,173.4	$ 2,308.1	$ 1,932.3	$ 1,891.0	
Short-Term Debt	$ 72.0	$ 116.6	$ 75.8	$ 494.9	$ 578.4	
Total Capital	$ 2,259.4	$ 2,290.0	$ 2,383.9	$ 2,427.2	$ 2,469.4	
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	36.2%	39.0%	36.7%	29.6%	37.9%	35.9%
Preferred Stock	0.0%	0.0%	3.5%	4.2%	4.3%	2.4%
Common Equity (1)	63.8%	61.0%	59.7%	66.2%	57.8%	61.7%
	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%
Based on Total Capital:						
Total Debt incl. Short Term	38.2%	42.1%	38.8%	43.9%	52.4%	43.1%
Preferred Stock	0.0%	0.0%	3.4%	3.3%	3.3%	2.0%
Common Equity (1)	61.8%	57.9%	57.8%	52.7%	44.3%	54.9%
	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%
Rate of Return on Book Common Equity (1)	10.3%	11.6%	13.3%	14.6%	14.8%	12.9%
Operating Ratio (2)	87.9%	85.3%	86.2%	83.6%	84.2%	85.4%
Coverage incl. AFUDC (3)						
Pre-tax: All Interest Charges	5.47 x	6.04 x	7.56 x	7.74 x	5.90 x	6.54 x
Post-tax: All Interest Charges	3.69 x	3.98 x	5.14 x	5.07 x	3.91 x	4.36 x
Overall Coverage: All Int. & Pfd. Div.	3.69 x	3.90 x	4.69 x	4.61 x	3.62 x	4.10 x
Coverage excl. AFUDC (3)						
Pre-tax: All Interest Charges	5.47 x	6.04 x	7.56 x	7.74 x	5.90 x	6.54 x
Post-tax: All Interest Charges	3.69 x	3.98 x	5.14 x	5.07 x	3.91 x	4.36 x
Overall Coverage: All Int. & Pfd. Div.	3.69 x	3.90 x	4.69 x	4.61 x	3.62 x	4.10 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Effective Income Tax Rate	39.9%	40.9%	36.9%	39.6%	40.7%	39.6%
Internal Cash Generation/Construction (4)	110.0%	76.8%	193.0%	205.2%	91.7%	135.3%
Gross Cash Flow/ Avg. Total Debt (5)	41.1%	38.8%	42.4%	37.4%	29.1%	37.8%
Gross Cash Flow Interest Coverage (6)	8.16 x	7.84 x	10.65 x	11.03 x	7.70 x	9.08 x
Common Dividend Coverage (7)	5.01 x	1.69 x	5.22 x	x	3.04 x	3.74 x

See Page 2 for Notes.

Northern Indiana Public Service Company
Capitalization and Financial Statistics
2003-2007, Inclusive

Notes:

(1) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.

(2) Total operating expenses, maintenance, depreciation and taxes other than income as a percentage of operating revenues.

(3) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.

(4) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally generated funds from operations after payment of all cash dividends.

(5) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFUDC) as a percentage of average total debt.

(6) Gross Cash Flow plus interest charges divided by interest charges.

(7) Common dividend coverage is the relationship of internally generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Utility COMPUSTAT

Electric Group
Capitalization and Financial Statistics [1]
2003-2007, Inclusive

	2007	2006	2005	2004	2003	
			(Millions of Dollars)			
Amount of Capital Employed						
Permanent Capital	$ 10,226.4	$ 10,972.7	$ 9,937.5	$ 10,229.6	$ 9,972.8	
Short-Term Debt	$ 655.8	$ 579.6	$ 384.0	$ 221.3	$ 236.5	
Total Capital	$ 10,882.2	$ 11,552.3	$ 10,321.5	$ 10,450.9	$ 10,209.3	
Market-Based Financial Ratios						Average
Earnings/Price Ratio	16 x	16 x	20 x	17 x	15 x	17 x
Market/Book Ratio	159.7%	159.7%	157.2%	146.1%	137.0%	151.9%
Dividend Yield	3.9%	3.8%	3.9%	4.2%	4.8%	4.1%
Dividend Payout Ratio	67.7%	63.6%	77.4%	72.2%	73.1%	70.8%
Capital Structure Ratios						
Based on Permanent Capital:						
Long-Term Debt	48.8%	49.8%	51.0%	52.0%	54.9%	51.3%
Preferred Stock	1.1%	1.3%	1.6%	2.2%	1.9%	1.6%
Common Equity [2]	50.2%	48.9%	47.4%	45.8%	43.3%	47.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:						
Total Debt incl. Short Term	52.7%	53.8%	54.0%	54.3%	56.6%	54.3%
Preferred Stock	1.0%	1.2%	1.6%	2.2%	1.9%	1.6%
Common Equity [2]	46.3%	45.0%	44.5%	43.6%	41.5%	44.2%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rate of Return on Book Common Equity [2]	10.4%	10.0%	9.6%	8.9%	9.8%	9.7%
Operating Ratio [3]	86.9%	86.5%	87.9%	86.1%	86.2%	86.7%
Coverage incl. AFUDC [4]						
Pre-tax: All Interest Charges	3.40 x	3.06 x	2.95 x	2.92 x	2.50 x	2.97 x
Post-tax: All Interest Charges	2.57 x	2.39 x	2.35 x	2.33 x	2.04 x	2.34 x
Overall Coverage: All Int. & Pfd. Div.	2.51 x	2.35 x	2.30 x	2.28 x	1.99 x	2.29 x
Coverage excl. AFUDC [4]						
Pre-tax: All Interest Charges	3.32 x	3.00 x	2.90 x	2.89 x	2.46 x	2.91 x
Post-tax: All Interest Charges	2.48 x	2.33 x	2.30 x	2.29 x	2.00 x	2.28 x
Overall Coverage: All Int. & Pfd. Div.	2.42 x	2.29 x	2.26 x	2.24 x	1.96 x	2.23 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	6.2%	3.5%	1.1%	2.3%	1.0%	2.8%
Effective Income Tax Rate	36.8%	34.0%	13.7%	28.5%	50.6%	32.7%
Internal Cash Generation/Construction [5]	70.4%	88.2%	103.8%	108.6%	96.2%	93.4%
Gross Cash Flow/ Avg. Total Debt [6]	21.2%	21.0%	21.3%	19.9%	17.7%	20.2%
Gross Cash Flow Interest Coverage [7]	4.55 x	4.35 x	4.54 x	4.43 x	3.98 x	4.37 x
Common Dividend Coverage [8]	4.56 x	3.80 x	4.08 x	3.95 x	4.01 x	4.08 x

See Page 2 for Notes.

Electric Group
Capitalization and Financial Statistics
2003-2007, Inclusive

Notes:

(1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
(2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account.
(3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
(4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
(5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
(6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
(7) Gross Cash Flow plus interest charges divided by interest charges.
(8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Basis of Selection:
The Electric Group includes companies that (i) are engaged in the electric utility business, (ii) have publicly-traded common stock, (iii) are contained in The Value Line Investment Survey, (iv) are transmission owning members of MISO or formerly had transmission assets that were transferred to separate transmission companies (i.e., were predecessors to American Transmission Company and International Transmission Company), and (v) are not currently the target of a merger or acquisition.

		Corporate Credit Ratings		Stock	S&P Stock	Value Line
Ticker	Company	Moody's	S&P	Traded	Ranking	Beta
LNT	Alliant Energy	A2	A-	NYSE	B	0.80
AEE	Ameren Corp.	Baa2	BBB-	NYSE	A-	0.80
CMS	CMS Energy Corp.	Baa2	BBB-	NYSE	C	1.15
DTE	DTE Energy Co.	Baa1	BBB	NYSE	B	0.75
DUK	Duke Energy	Baa1	A-	NYSE	B	NMF
EDE	Empire District	Baa2	BBB-	NYSE	B	0.85
FE	FirstEnergy Corp.	Baa2	BBB	NYSE	A-	0.80
TEG	Integrys Energy	A1	A	NYSE	A-	0.80
MGEE	MGE Energy Inc.	Aa3	AA-	NDQ	B+	0.90
NI	NiSource Inc.	Baa2	BBB-	NYSE	B	0.90
VVC	Vectren Corp.	Baa1	A-	NYSE	B+	0.90
WEC	Wisconsin Energy	A1	A-	NYSE	B	0.80
XEL	Xcel Energy	A3	BBB+	NYSE	B	0.75
	Average	A3	BBB+		B	0.85

Note: Ratings are those of utility subsidiaries

Source of Information: Utility COMPUSTAT
Moody's Investors Service
Standard & Poor's Corporation
S&P Stock Guide

Standard & Poor's Public Utilities
Capitalization and Financial Statistics [1]
2003-2007, Inclusive

	2007	2006	2005 (Millions of Dollars)	2004	2003	Average
Amount of Capital Employed						
Permanent Capital	$ 15,126.8	$ 15,219.8	$ 14,312.2	$ 14,207.4	$ 14,016.5	
Short-Term Debt	$ 593.1	$ 491.9	$ 452.6	$ 261.7	$ 274.0	
Total Capital	$ 15,719.9	$ 15,711.7	$ 14,764.8	$ 14,469.1	$ 14,290.5	
Market-Based Financial Ratios						
Price-Earnings Multiple	16 x	16 x	16 x	15 x	14 x	15 x
Market/Book Ratio	223.3%	205.9%	201.0%	170.4%	149.8%	190.1%
Dividend Yield	3.3%	3.5%	3.6%	3.8%	4.2%	3.7%
Dividend Payout Ratio	53.9%	57.8%	57.0%	58.4%	63.9%	58.2%
Capital Structure Ratios						
Based on Permanent Captial:						
Long-Term Debt	52.1%	53.4%	54.7%	56.5%	59.2%	55.2%
Preferred Stock	1.2%	1.2%	1.3%	1.5%	1.4%	1.3%
Common Equity [2]	46.8%	45.5%	44.0%	42.0%	39.4%	43.5%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Based on Total Capital:						
Total Debt incl. Short Term	54.4%	55.3%	56.8%	58.1%	60.6%	57.0%
Preferred Stock	1.1%	1.2%	1.3%	1.5%	1.4%	1.3%
Common Equity [2]	44.5%	43.5%	42.0%	40.5%	38.0%	41.7%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rate of Return on Book Common Equity [2]	13.9%	12.8%	12.0%	12.9%	12.2%	12.8%
Operating Ratio [3]	81.9%	84.5%	85.8%	84.6%	85.0%	84.4%
Coverage incl. AFUDC [4]						
Pre-tax: All Interest Charges	3.75 x	3.32 x	3.16 x	3.03 x	2.52 x	3.16 x
Post-tax: All Interest Charges	2.84 x	2.57 x	2.51 x	2.43 x	2.09 x	2.49 x
Overall Coverage: All Int. & Pfd. Div.	2.80 x	2.53 x	2.47 x	2.39 x	2.05 x	2.45 x
Coverage excl. AFUDC [4]						
Pre-tax: All Interest Charges	3.68 x	3.28 x	3.12 x	3.00 x	2.48 x	3.11 x
Post-tax: All Interest Charges	2.77 x	2.53 x	2.47 x	2.40 x	2.05 x	2.44 x
Overall Coverage: All Int. & Pfd. Div.	2.74 x	2.49 x	2.43 x	2.36 x	2.01 x	2.41 x
Quality of Earnings & Cash Flow						
AFC/Income Avail. for Common Equity	4.0%	2.5%	1.0%	2.3%	1.9%	2.3%
Effective Income Tax Rate	34.1%	32.7%	31.6%	26.1%	40.6%	33.0%
Internal Cash Generation/Construction [5]	85.8%	92.9%	102.9%	124.2%	126.5%	106.5%
Gross Cash Flow/ Avg. Total Debt [6]	24.8%	23.1%	20.9%	20.9%	20.8%	22.1%
Gross Cash Flow Interest Coverage [7]	4.92 x	4.47 x	4.34 x	4.37 x	4.40 x	4.50 x
Common Dividend Coverage [8]	5.93 x	4.39 x	4.36 x	4.67 x	5.03 x	4.88 x

See Page 2 for Notes.

Standard & Poor's Public Utilities
Capitalization and Financial Statistics
2003-2007, Inclusive

Notes:

(1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group.
(2) Excluding Accumulated Other Comprehensive Income ("OCI") from the equity account
(3) Total operating expenses, maintenance, depreciation and taxes other than income taxes as a percent of operating revenues.
(4) Coverage calculations represent the number of times available earnings, both including and excluding AFUDC (allowance for funds used during construction) as reported in its entirety, cover fixed charges.
(5) Internal cash generation/gross construction is the percentage of gross construction expenditures provided by internally-generated funds from operations after payment of all cash dividends divided by gross construction expenditures.
(6) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) as a percentage of average total debt.
(7) Gross Cash Flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less total AFUDC) plus interest charges, divided by interest charges.
(8) Common dividend coverage is the relationship of internally-generated funds from operations after payment of preferred stock dividends to common dividends paid.

Source of Information: Annual Reports to Shareholders
Utility COMPUSTAT

Standard & Poor's Public Utilities

Company Identities [1]

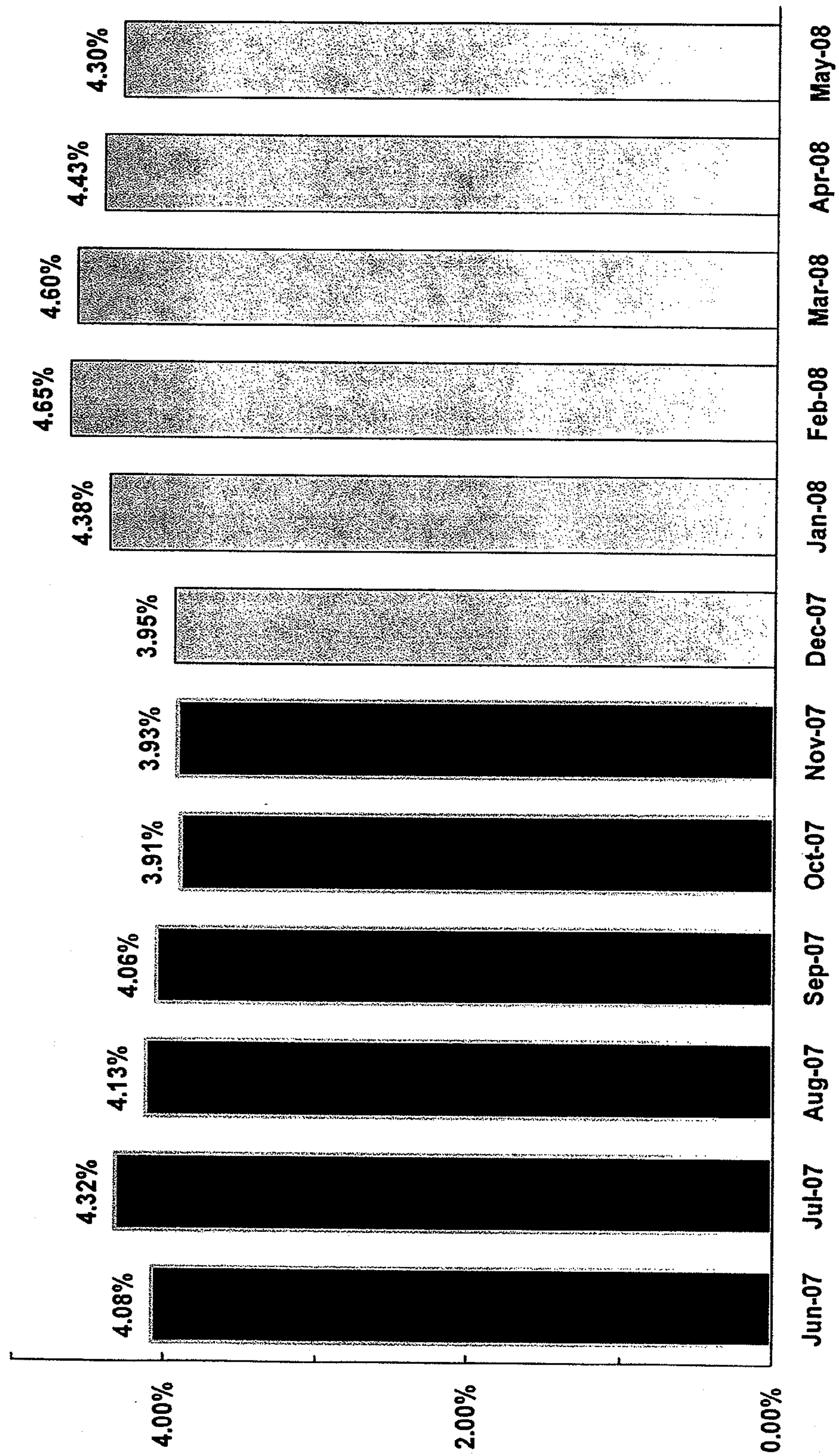
	Ticker	Credit Rating [2] Moody's	Credit Rating [2] S&P	Common Stock Traded	S&P Stock Ranking	Value Line Beta
Allegheny Energy	AYE	Baa3	BB+	NYSE	B-	1.40
Ameren Corporation	AEE	Baa2	BBB-	NYSE	A-	0.80
American Electric Power	AEP	Baa2	BBB	NYSE	B	0.95
CMS Energy	CMS	Baa2	BBB-	NYSE	C	1.35
CenterPoint Energy	CNP	Baa3	BBB	NYSE	B	0.95
Consolidated Edison	ED	A1	A	NYSE	B+	0.75
Constellation Energy Group	CEG	A3	BBB+	NYSE	B	0.85
DTE Energy Co.	DTE	Baa1	BBB	NYSE	B+	0.80
Dominion Resources	D	Baa1	BBB	NYSE	B+	0.75
Duke Energy	DUK	Baa1	A-	NYSE	B+	NMF
Edison Int'l	EIX	Baa1	BBB+	NYSE	B	0.85
Entergy Corp.	ETR	Baa2	BBB	NYSE	B+	0.85
Exelon Corp.	EXC	A3	BBB+	NYSE	B+	0.90
FPL Group	FPL	A1	A	NYSE	A-	0.75
FirstEnergy Corp.	FE	Baa2	BBB	NYSE	B+	0.85
Integrys Energy Group	TEG	A1	A	NYSE	B	0.80
NICOR Inc.	GAS	A1	AA	NYSE	B	1.00
NiSource Inc.	NI	Baa2	BBB-	NYSE	B	0.90
PEPCO Holdings, Inc.	POM	Baa2	BBB	NYSE	B	0.95
PG&E Corp.	PCG	Baa1	BBB	NYSE	B	0.85
PPL Corp.	PPL	Baa1	A-	NYSE	B	0.90
Pinnacle West Capital	PNW	Baa2	BBB-	NYSE	A-	0.80
Progress Energy, Inc.	PGN	Baa1	BBB	NYSE	B+	0.85
Public Serv. Enterprise Inc.	PEG	Baa1	BBB	NYSE	B+	0.95
Questar Corp.	STR	A2	A-	NYSE	A-	0.90
Sempra Energy	SRE	A2	A	NYSE	B	0.90
Southern Co.	SO	A2	A	NYSE	A-	0.70
TECO Energy	TE	Baa2	BBB-	NYSE	B-	0.95
Xcel Energy Inc	XEL	A3	BBB+	NYSE	B	0.80
Average for S&P Utilities		Baa1	BBB+		B	0.89

Note: [1] Includes companies contained in S&P Utility Compustat. AES Corp. and Dynegy, Inc. are not included.

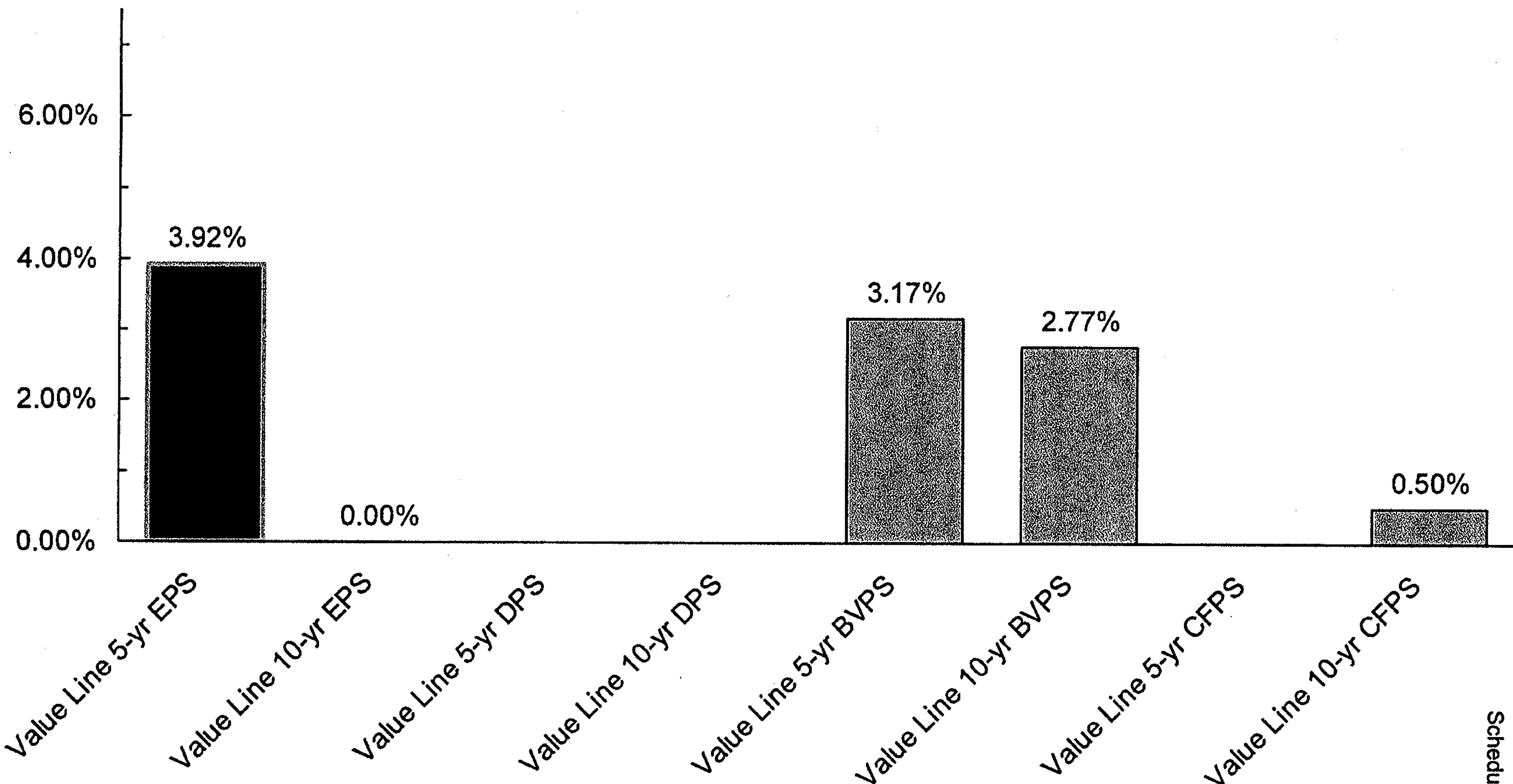
[2] Ratings are those of utility subsidiaries

Source of Information: Moody's Investors Service
Standard & Poor's Corporation
Standard & Poor's Stock Guide
Value Line Investment Survey for Windows

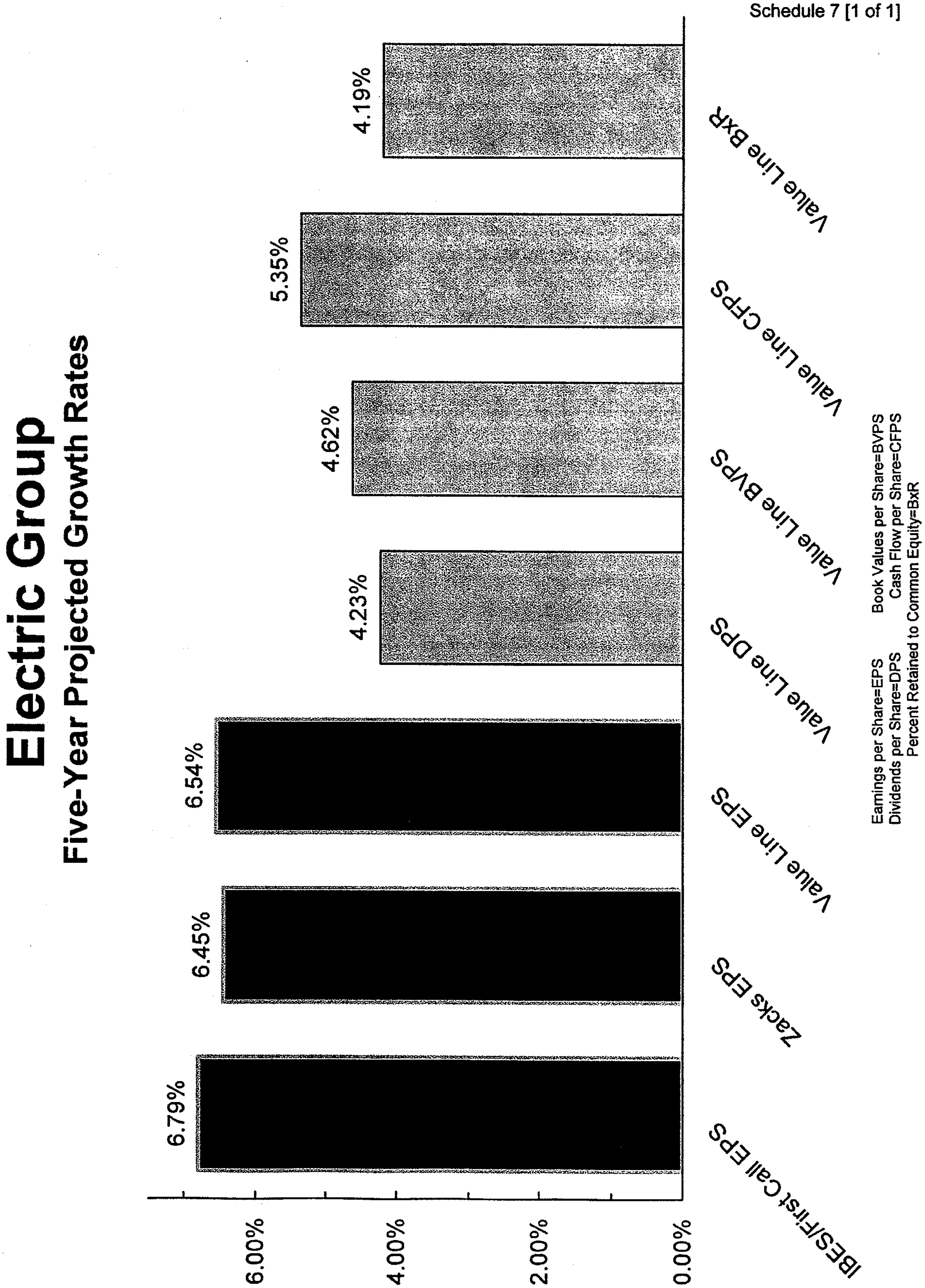
Electric Group
Monthly Dividend Yield



Electric Group
Historical Growth Rates



Earnings per Share=EPS
Dividends per Share=DPS
Book Values per Share=BVPS
Cash Flow per Share=CFPS
Percent Retained to Common Equity=BxR


Electric Group
Five-Year Projected Growth Rates
6.79%
6.45%
6.54%
4.23%
4.62%
5.35%
4.19%
6.00%
4.00%
2.00%
0.00%
IBES/First Call EPS
Zacks EPS
Value Line EPS
Value Line DPS
Value Line BVPS
Value Line CFPS
Value Line BxR
Earnings per Share=EPS
Dividends per Share=DPS
Book Values per Share=BVPS
Cash Flow per Share=CFPS
Percent Retained to Common Equity=BxR

Electric Industry
Analysis of Public Offerings of Common Stock
Years 2003-2007

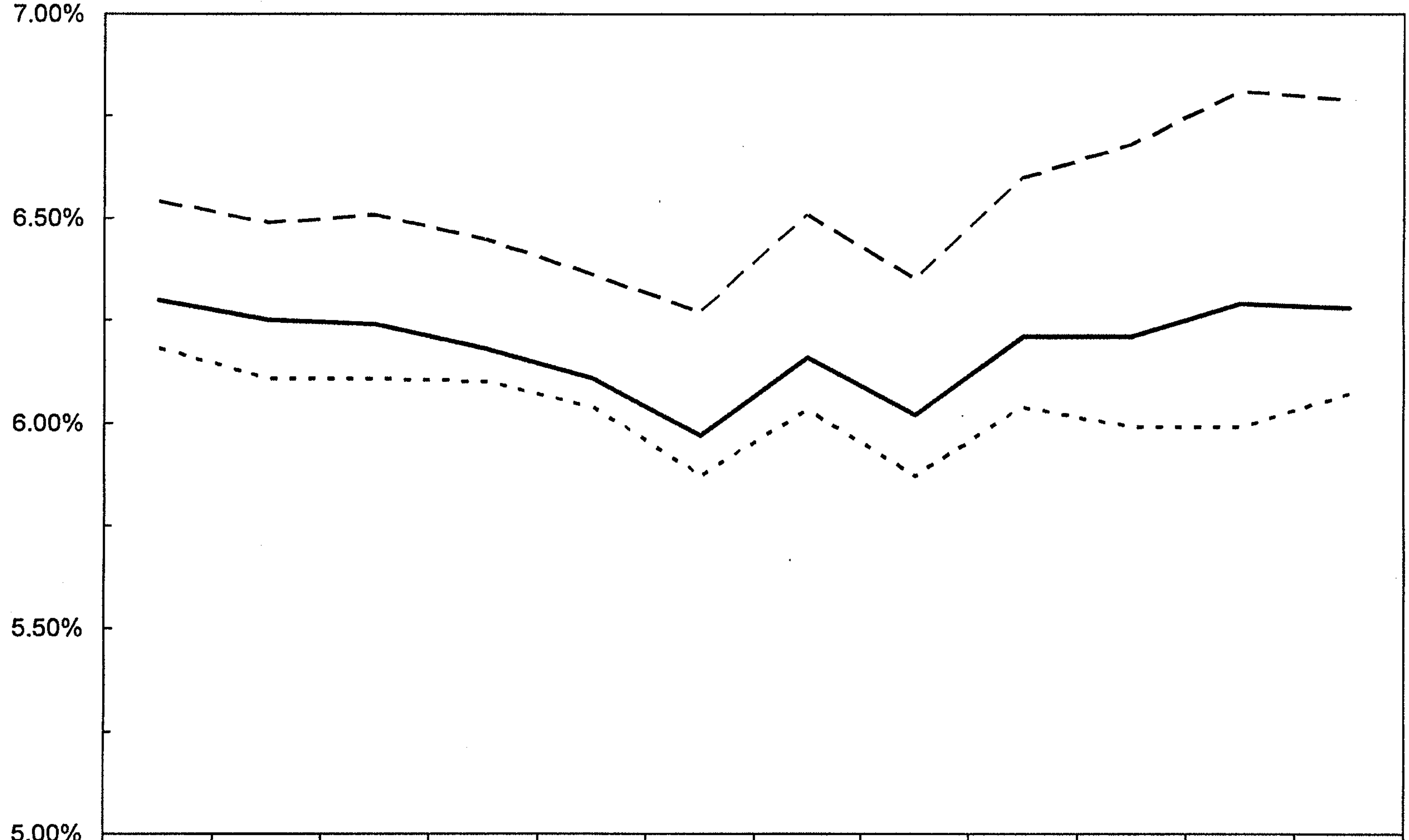
	Ameren	Cinergy	American Electric	PPL Corp.	Consolidated Edison	OGE Corp	TECO Energy	First Energy	PSEG	Unitil	Pudget Energy
Date of Offering	1/14/2003	1/31/2003	2/27/2003	5/15/2003	5/16/2003	8/21/2003	9/10/2003	9/12/2003	10/1/2003	10/21/2003	10/31/2003
No. of shares offered (000)	5,500	5,700	56,158	65,000	87,000	4,650	11,000	28,000	8,250	6,524	4,550
Dollar amt. of offering ($000)	$ 222,750	$ 177,270	$1,176,514	$2,486,251	$3,462,600	$ 100,440	$ 129,360	$ 840,000	$ 344,438	$ 165,710	$ 103,513
Price to public	$ 40.500	$ 31.100	$ 20.950	$ 38.470	$ 39.800	$ 21.900	$ 12.500	$ 30.000	$ 41.750	$ 25.400	$ 22.750
Underwriter's discounts and commission	$ 1.320	$ 0.250	$ 0.629	$ 1.243	$ 0.345	$ 0.790	NA	$ 0.975	$ 1.253	$ 1.270	$ 0.750
Gross Proceeds	$ 39.180	$ 30.850	$ 20.321	$ 37.227	$ 39.455	$ 21.110	$ 12.500	$ 29.025	$ 40.497	$ 24.130	$ 22.000
Estimated company issuance expenses	$ 0.073	$ 0.035	$ 0.010	$ 0.006	$ 0.004	NA	NA	$ 0.015	$ 0.042	NA	NA
Net proceeds to company per share	$ 39.107	$ 30.815	$ 20.311	$ 37.221	$ 39.451	$ 21.110	$ 12.500	$ 29.010	$ 40.455	$ 24.130	$ 22.000
Underwriter's discount as a percent of offering price	3.3%	0.8%	3.0%	3.2%	0.9%	3.6%	NA	3.3%	3.0%	5.0%	3.3%
Issuance expense as a percent of offering price	0.2%	0.1%	0.0%	0.0%	0.0%	NA	NA	0.1%	0.1%	NA	NA
Total Issuance and selling expense as as a percent of offering price	3.5%	0.9%	3.0%	3.2%	0.9%	3.6%	NA	3.4%	3.1%	5.0%	3.3%

	WPS Resources	Empire District	Hawaiian Electric	ConEdison	Great Plains	Constellation	Ameren	CMS Energy	Ottertail	Idacorp	Cinergy
Date of Offering	11/19/2003	12/11/2003	3/10/2004	4/11/2004	6/8/2004	6/28/2004	6/30/2004	10/7/2004	12/7/2004	12/9/2004	12/15/2004
No. of shares offered (000)	3,500	2,000	2,000	14,000	6,000	6,000	10,000	28,500	2,900	3,500	6,100
Dollar amt. of offering ($000)	$ 150,500	$ 42,300	$ 103,720	$ 528,360	$ 150,000	$ 227,700	$ 420,000	$ 259,350	$ 73,805	$ 105,000	$ 250,100
Price to public	$ 43.000	$ 21.290	$ 51.860	$ 37.750	$ 25.000	$ 37.950	$ 42.000	$ 9.100	$ 25.450	$ 30.000	$ 41.000
Underwriter's discounts and commission	$ 0.798	$ 0.900	$ 2.074	$ 1.132	$ 0.750	$ 0.140	$ 1.260	$ 0.319	$ 0.950	$ 1.200	$ 0.490
Gross Proceeds	$ 42.202	$ 20.390	$ 49.786	$ 36.618	$ 24.250	$ 37.810	$ 40.740	$ 8.781	$ 24.500	$ 28.800	$ 40.510
Estimated company issuance expenses	NA	NA	$ 0.075	$ 0.029	$ 0.083	$ 0.042	$ 0.040	$ 0.011	$ 0.103	$ 0.086	$ 0.033
Net proceeds to company per share	$ 42.202	$ 20.390	$ 49.711	$ 36.589	$ 24.167	$ 37.768	$ 40.700	$ 8.770	$ 24.397	$ 28.714	$ 40.477
Underwriter's discount as a percent of offering price	1.9%	4.2%	4.0%	3.0%	3.0%	0.4%	3.0%	3.5%	3.7%	4.0%	1.2%
Issuance expense as a percent of offering price	NA	NA	0.1%	0.1%	0.3%	0.1%	0.1%	0.1%	0.4%	0.3%	0.1%
Total Issuance and selling expense as as a percent of offering price	1.9%	4.2%	4.1%	3.1%	3.3%	0.5%	3.1%	3.6%	4.1%	4.3%	1.3%

	Cinergy	CMS Energy	Pinnacle West	Pudget Energy	WPS Resources	Northeast Utilities	Vectren Corp	Energy East	Empire District	Average
Date of Offering	1/28/2005	3/30/2005	4/27/2005	11/1/2005	11/27/2005	12/12/2006	2/22/2007	3/21/2007	12/6/2007	
No. of shares offered (000)	3,399	20,000	5,300	15,000	1,900	20,000	4,600	9,000	3,000	
Dollar amt. of offering ($000)	$ 169,950	$ 245,000	$ 222,600	$ 312,000	$ 102,030	$ 381,800	$ 130,318	$ 218,250	$ 69,000	
Price to public	$ 50.000	$ 12.250	$ 42.000	$ 20.800	$ 53.700	$ 19.090	$ 28.330	$ 24.250	$ 23.000	
Underwriter's discounts and commission	$ 1.500	$ 0.429	$ 1.365	$ 0.130	$ 1.745	$ 0.620	$ 0.990	$ 0.728	$ 0.997	
Gross Proceeds	$ 48.500	$ 11.821	$ 40.635	$ 20.670	$ 51.955	$ 18.470	$ 27.340	$ 23.522	$ 22.003	
Estimated company issuance expenses	$ 0.221	$ 0.012	$ 0.047	$ 0.020	NA	$ 0.017	$ 0.092	$ 0.018	$ 0.083	
Net proceeds to company per share	$ 48.279	$ 11.809	$ 40.588	$ 20.670	$ 51.955	$ 18.453	$ 27.248	$ 23.504	$ 21.920	
Underwriter's discount as a percent of offering price	3.0%	3.5%	3.3%	0.6%	3.2%	3.2%	3.5%	3.0%	4.3%	3.0%
Issuance expense as a percent of offering price	0.4%	0.1%	0.1%	0.1%	NA	0.1%	0.3%	0.1%	0.4%	0.2%
Total Issuance and selling expense as as a percent of offering price	3.4%	3.6%	3.4%	0.7%	3.2%	3.3%	3.8%	3.1%	4.7%	3.2%

Source of Information: Public Utility Financing Tracker

Interest Rates for
Investment Grade Public Utility Bonds



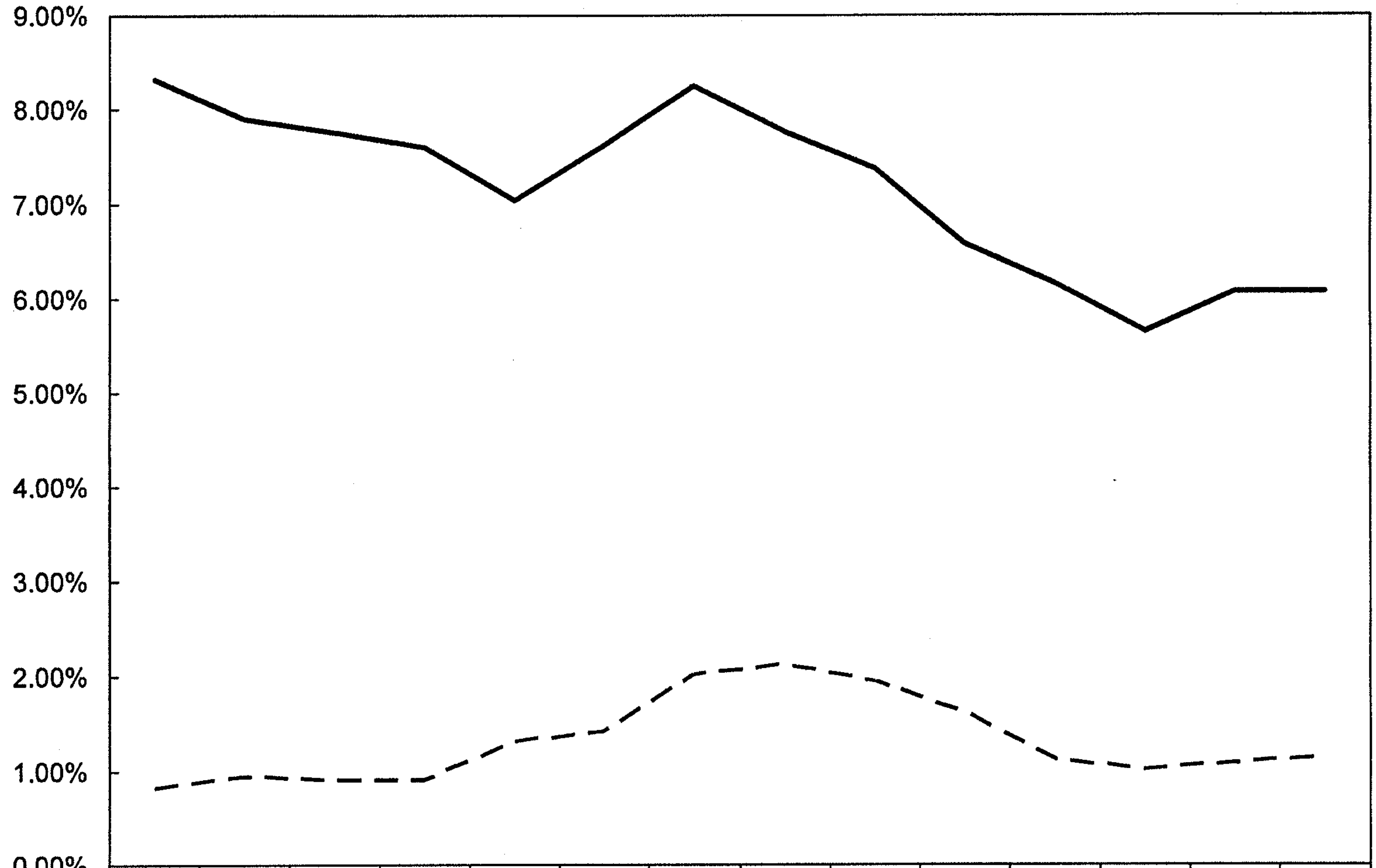
	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
- - - - Aa	6.18%	6.11%	6.11%	6.10%	6.04%	5.87%	6.03%	5.87%	6.04%	5.99%	5.99%	6.07%
—— A	6.30%	6.25%	6.24%	6.18%	6.11%	5.97%	6.16%	6.02%	6.21%	6.21%	6.29%	6.28%
— — Baa	6.54%	6.49%	6.51%	6.45%	6.36%	6.27%	6.51%	6.35%	6.60%	6.68%	6.81%	6.79%

Interest Rates for Investment Grade Public Utility Bonds
Yearly for 2003-2007
and the Twelve Months Ended May 2008

Years	Aa Rated	A Rated	Baa Rated	Average
2003	6.40%	6.58%	6.84%	6.61%
2004	6.04%	6.16%	6.40%	6.20%
2005	5.44%	5.65%	5.93%	5.67%
2006	5.84%	6.07%	6.32%	6.08%
2007	5.94%	6.07%	6.33%	6.11%
Five-Year Average	5.93%	6.11%	6.36%	6.13%
Months				
Jun-07	6.18%	6.30%	6.54%	6.34%
Jul-07	6.11%	6.25%	6.49%	6.28%
Aug-07	6.11%	6.24%	6.51%	6.28%
Sep-07	6.10%	6.18%	6.45%	6.24%
Oct-07	6.04%	6.11%	6.36%	6.17%
Nov-07	5.87%	5.97%	6.27%	6.04%
Dec-07	6.03%	6.16%	6.51%	6.23%
Jan-08	5.87%	6.02%	6.35%	6.08%
Feb-08	6.04%	6.21%	6.60%	6.28%
Mar-08	5.99%	6.21%	6.68%	6.29%
Apr-08	5.99%	6.29%	6.81%	6.36%
May-08	6.07%	6.28%	6.79%	6.38%
Twelve-Month Average	6.03%	6.19%	6.53%	6.25%
Six-Month Average	6.00%	6.20%	6.62%	6.27%
Three-Month Average	6.02%	6.26%	6.76%	6.34%

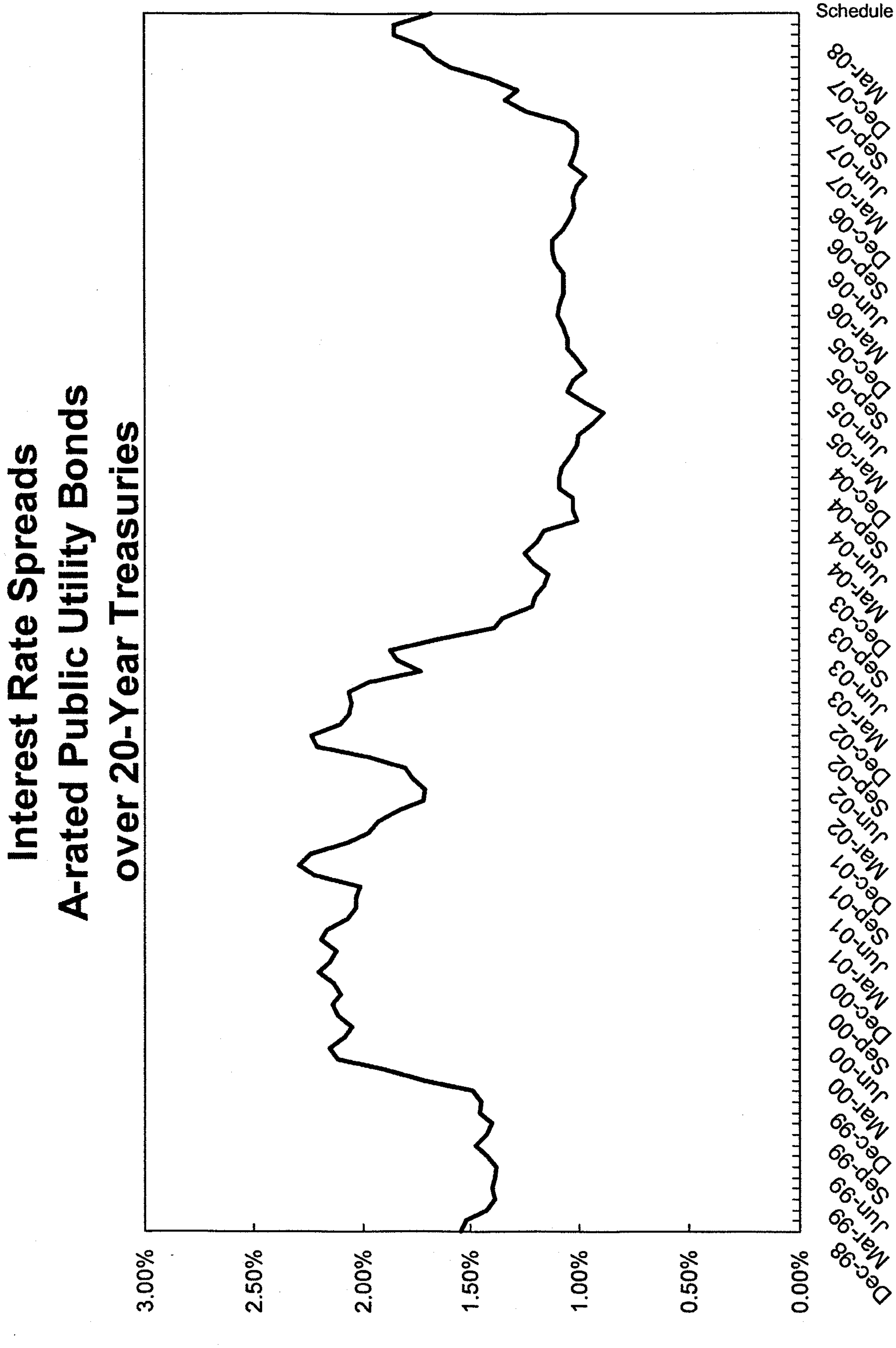
Source: Mergent Bond Record

Yields on A-rated Public Utility Bonds and Spreads over 20-Year Treasuries



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
A-rated Public Utility	8.31%	7.89%	7.75%	7.60%	7.04%	7.62%	8.24%	7.76%	7.37%	6.58%	6.16%	5.65%	6.07%	6.07%
Spread vs. 20-year	0.82%	0.94%	0.92%	0.91%	1.32%	1.42%	2.01%	2.13%	1.94%	1.62%	1.12%	1.01%	1.08%	1.16%

Petitioner's Exhibit PRM-2
Northern Indiana Public Service Company
Cause No. 43526
Page 17 of 29
Schedule 9 [3 of 5]


Interest Rate Spreads
A-rated Public Utility Bonds
over 20-Year Treasuries
3.00%
2.50%
2.00%
1.50%
1.00%
0.50%
0.00%
Dec-98
Mar-99
Jun-99
Sep-99
Dec-99
Mar-00
Jun-00
Sep-00
Dec-00
Mar-01
Jun-01
Sep-01
Dec-01
Mar-02
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Sep-06
Dec-06
Mar-07
Jun-07
Sep-07
Dec-07
Mar-08

A rated Public Utility Bonds over 20-Year Treasuries

Year	A-rated Public Utility	20-Year Treasuries Yield	20-Year Treasuries Spread	Year	A-rated Public Utility	20-Year Treasuries Yield	20-Year Treasuries Spread
Dec-98	6.91%	5.36%	1.55%				
Jan-99	6.97%	5.45%	1.52%	Jan-04	6.15%	5.01%	1.14%
Feb-99	7.09%	5.66%	1.43%	Feb-04	6.15%	4.94%	1.21%
Mar-99	7.26%	5.87%	1.39%	Mar-04	5.97%	4.72%	1.25%
Apr-99	7.22%	5.82%	1.40%	Apr-04	6.35%	5.16%	1.19%
May-99	7.47%	6.08%	1.39%	May-04	6.62%	5.46%	1.16%
Jun-99	7.74%	6.36%	1.38%	Jun-04	6.46%	5.45%	1.01%
Jul-99	7.71%	6.28%	1.43%	Jul-04	6.27%	5.24%	1.03%
Aug-99	7.91%	6.43%	1.48%	Aug-04	6.14%	5.07%	1.07%
Sep-99	7.93%	6.50%	1.43%	Sep-04	5.98%	4.89%	1.09%
Oct-99	8.06%	6.66%	1.40%	Oct-04	5.94%	4.85%	1.09%
Nov-99	7.94%	6.48%	1.46%	Nov-04	5.97%	4.89%	1.08%
Dec-99	8.14%	6.69%	1.45%	Dec-04	5.92%	4.88%	1.04%
Jan-00	8.35%	6.86%	1.49%	Jan-05	5.78%	4.77%	1.01%
Feb-00	8.25%	6.54%	1.71%	Feb-05	5.61%	4.61%	1.00%
Mar-00	8.28%	6.38%	1.90%	Mar-05	5.83%	4.89%	0.94%
Apr-00	8.29%	6.18%	2.11%	Apr-05	5.64%	4.75%	0.89%
May-00	8.70%	6.55%	2.15%	May-05	5.53%	4.56%	0.97%
Jun-00	8.36%	6.28%	2.08%	Jun-05	5.40%	4.35%	1.05%
Jul-00	8.25%	6.20%	2.05%	Jul-05	5.51%	4.48%	1.03%
Aug-00	8.13%	6.02%	2.11%	Aug-05	5.50%	4.53%	0.97%
Sep-00	8.23%	6.09%	2.14%	Sep-05	5.52%	4.51%	1.01%
Oct-00	8.14%	6.04%	2.10%	Oct-05	5.79%	4.74%	1.05%
Nov-00	8.11%	5.98%	2.13%	Nov-05	5.88%	4.83%	1.05%
Dec-00	7.84%	5.64%	2.20%	Dec-05	5.80%	4.73%	1.07%
Jan-01	7.80%	5.65%	2.15%	Jan-06	5.75%	4.65%	1.10%
Feb-01	7.74%	5.62%	2.12%	Feb-06	5.82%	4.73%	1.09%
Mar-01	7.68%	5.49%	2.19%	Mar-06	5.98%	4.91%	1.07%
Apr-01	7.94%	5.78%	2.16%	Apr-06	6.29%	5.22%	1.07%
May-01	7.99%	5.92%	2.07%	May-06	6.42%	5.35%	1.07%
Jun-01	7.85%	5.82%	2.03%	Jun-06	6.40%	5.29%	1.11%
Jul-01	7.78%	5.75%	2.03%	Jul-06	6.37%	5.25%	1.12%
Aug-01	7.59%	5.58%	2.01%	Aug-06	6.20%	5.08%	1.12%
Sep-01	7.75%	5.53%	2.22%	Sep-06	6.00%	4.93%	1.07%
Oct-01	7.63%	5.34%	2.29%	Oct-06	5.98%	4.94%	1.04%
Nov-01	7.57%	5.33%	2.24%	Nov-06	5.80%	4.78%	1.02%
Dec-01	7.83%	5.76%	2.07%	Dec-06	5.81%	4.78%	1.03%
Jan-02	7.66%	5.69%	1.97%	Jan-07	5.96%	4.95%	1.01%
Feb-02	7.54%	5.61%	1.93%	Feb-07	5.90%	4.93%	0.97%
Mar-02	7.76%	5.93%	1.83%	Mar-07	5.85%	4.81%	1.04%
Apr-02	7.57%	5.85%	1.72%	Apr-07	5.97%	4.95%	1.02%
May-02	7.52%	5.81%	1.71%	May-07	5.99%	4.98%	1.01%
Jun-02	7.42%	5.65%	1.77%	Jun-07	6.30%	5.29%	1.01%
Jul-02	7.31%	5.51%	1.80%	Jul-07	6.25%	5.19%	1.06%
Aug-02	7.17%	5.19%	1.98%	Aug-07	6.24%	5.00%	1.24%
Sep-02	7.08%	4.87%	2.21%	Sep-07	6.18%	4.84%	1.34%
Oct-02	7.23%	5.00%	2.23%	Oct-07	6.11%	4.83%	1.28%
Nov-02	7.14%	5.04%	2.10%	Nov-07	5.97%	4.56%	1.41%
Dec-02	7.07%	5.01%	2.06%	Dec-07	6.16%	4.57%	1.59%
Jan-03	7.07%	5.02%	2.05%	Jan-08	6.02%	4.35%	1.67%
Feb-03	6.93%	4.87%	2.06%	Feb-08	6.21%	4.49%	1.72%
Mar-03	6.79%	4.82%	1.97%	Mar-08	6.21%	4.36%	1.85%
Apr-03	6.64%	4.91%	1.73%	Apr-08	6.29%	4.44%	1.85%
May-03	6.36%	4.52%	1.84%	May-08	6.28%	4.60%	1.68%
Jun-03	6.21%	4.34%	1.87%				
Jul-03	6.57%	4.92%	1.65%				
Aug-03	6.78%	5.39%	1.39%				
Sep-03	6.56%	5.21%	1.35%	Average:			
Oct-03	6.43%	5.21%	1.22%	12-months			1.48%
Nov-03	6.37%	5.17%	1.20%	6-months			1.73%
Dec-03	6.27%	5.11%	1.16%	3-months			1.79%

S&P Composite Index and S&P Public Utility Index
Long-Term Corporate and Public Utility Bonds
Yearly Total Returns
1928-2007

Year	S & P Composite Index	S & P Public Utility Index	Long Term Corporate Bonds	Public Utility Bonds
1928	43.61%	57.47%	2.84%	3.08%
1929	-8.42%	11.02%	3.27%	2.34%
1930	-24.90%	-21.96%	7.98%	4.74%
1931	-43.34%	-35.90%	-1.85%	-11.11%
1932	-8.19%	-0.54%	10.82%	7.25%
1933	53.99%	-21.87%	10.38%	-3.82%
1934	-1.44%	-20.41%	13.84%	22.61%
1935	47.67%	76.63%	9.61%	16.03%
1936	33.92%	20.69%	6.74%	8.30%
1937	-35.03%	-37.04%	2.75%	-4.05%
1938	31.12%	22.45%	6.13%	8.11%
1939	-0.41%	11.26%	3.97%	6.76%
1940	-9.78%	-17.15%	3.39%	4.45%
1941	-11.59%	-31.57%	2.73%	2.15%
1942	20.34%	15.39%	2.60%	3.81%
1943	25.90%	46.07%	2.83%	7.04%
1944	19.75%	18.03%	4.73%	3.29%
1945	36.44%	53.33%	4.08%	5.92%
1946	-8.07%	1.26%	1.72%	2.98%
1947	5.71%	-13.16%	-2.34%	-2.19%
1948	5.50%	4.01%	4.14%	2.65%
1949	18.79%	31.39%	3.31%	7.16%
1950	31.71%	3.25%	2.12%	2.01%
1951	24.02%	18.63%	-2.69%	-2.77%
1952	18.37%	19.25%	3.52%	2.99%
1953	-0.99%	7.85%	3.41%	2.08%
1954	52.62%	24.72%	5.39%	7.57%
1955	31.56%	11.26%	0.48%	0.12%
1956	6.56%	5.06%	-6.81%	-6.25%
1957	-10.78%	6.36%	8.71%	3.58%
1958	43.36%	40.70%	-2.22%	0.18%
1959	11.96%	7.49%	-0.97%	-2.29%
1960	0.47%	20.26%	9.07%	9.01%
1961	26.89%	29.33%	4.82%	4.65%
1962	-8.73%	-2.44%	7.95%	6.55%
1963	22.80%	12.36%	2.19%	3.44%
1964	16.48%	15.91%	4.77%	4.94%
1965	12.45%	4.67%	-0.46%	0.50%
1966	-10.06%	-4.48%	0.20%	-3.45%
1967	23.98%	-0.63%	-4.95%	-3.63%
1968	11.06%	10.32%	2.57%	1.87%
1969	-8.50%	-15.42%	-8.09%	-6.66%
1970	4.01%	16.56%	18.37%	15.90%
1971	14.31%	2.41%	11.01%	11.59%
1972	18.98%	8.15%	7.26%	7.19%
1973	-14.66%	-18.07%	1.14%	2.42%
1974	-26.47%	-21.55%	-3.06%	-5.28%
1975	37.20%	44.49%	14.64%	15.50%
1976	23.84%	31.81%	18.65%	19.04%
1977	-7.18%	8.64%	1.71%	5.22%
1978	6.56%	-3.71%	-0.07%	-0.98%
1979	18.44%	13.58%	-4.18%	-2.75%
1980	32.42%	15.08%	-2.76%	-0.23%
1981	-4.91%	11.74%	-1.24%	4.27%
1982	21.41%	26.52%	42.56%	33.52%
1983	22.51%	20.01%	6.26%	10.33%
1984	6.27%	26.04%	16.86%	14.82%
1985	32.16%	33.05%	30.09%	26.48%
1986	18.47%	28.53%	19.85%	18.16%
1987	5.23%	-2.92%	-0.27%	3.02%
1988	16.81%	18.27%	10.70%	10.19%
1989	31.49%	47.80%	16.23%	15.61%
1990	-3.17%	-2.57%	6.78%	8.13%
1991	30.55%	14.61%	19.89%	19.25%
1992	7.67%	8.10%	9.39%	8.65%
1993	9.99%	14.41%	13.19%	10.59%
1994	1.31%	-7.94%	-5.76%	-4.72%
1995	37.43%	42.15%	27.20%	22.81%
1996	23.07%	3.14%	1.40%	3.04%
1997	33.36%	24.69%	12.95%	11.39%
1998	28.58%	14.82%	10.76%	9.44%
1999	21.04%	-8.85%	-7.45%	-1.69%
2000	-9.11%	59.70%	12.87%	9.45%
2001	-11.88%	-30.41%	10.65%	5.85%
2002	-22.10%	-30.04%	16.33%	1.63%
2003	28.70%	26.11%	5.27%	10.01%
2004	10.87%	24.22%	8.72%	6.03%
2005	4.91%	16.79%	5.87%	3.02%
2006	15.80%	20.95%	3.24%	3.94%
2007	5.49%	19.39%	2.60%	5.20%
Geometric Mean	10.04%	8.92%	5.81%	5.45%
Arithmetic Mean	11.95%	11.24%	6.13%	5.72%
Standard Deviation	20.02%	22.43%	8.52%	7.84%
Median	13.38%	12.05%	4.11%	4.55%

Tabulation of Risk Rate Differentials for
S&P Public Utility Index and Public Utility Bonds
For the Years 1928-2007, 1952-2007, 1974-2007, and 1979-2007

Total Returns	Range: Geometric Mean	Range: Median	Midpoint	Point Estimate: Arithmetic Mean	Average of the Midpoint of Range and Point Estimate
1928-2007					
S&P Public Utility Index	8.92%	12.05%		11.24%	
Public Utility Bonds	5.45%	4.55%		5.72%	
Risk Differential	3.47%	7.50%	5.49%	5.52%	5.51%
1952-2007					
S&P Public Utility Index	11.14%	14.00%		12.65%	
Public Utility Bonds	6.15%	5.07%		6.45%	
Risk Differential	4.99%	8.93%	6.96%	6.20%	6.58%
1974-2007					
S&P Public Utility Index	12.98%	15.94%		14.90%	
Public Utility Bonds	8.45%	8.39%		8.79%	
Risk Differential	4.53%	7.55%	6.04%	6.11%	6.08%
1979-2007					
S&P Public Utility Index	13.62%	16.79%		15.41%	
Public Utility Bonds	8.83%	8.65%		9.15%	
Risk Differential	4.79%	8.14%	6.47%	6.26%	6.37%

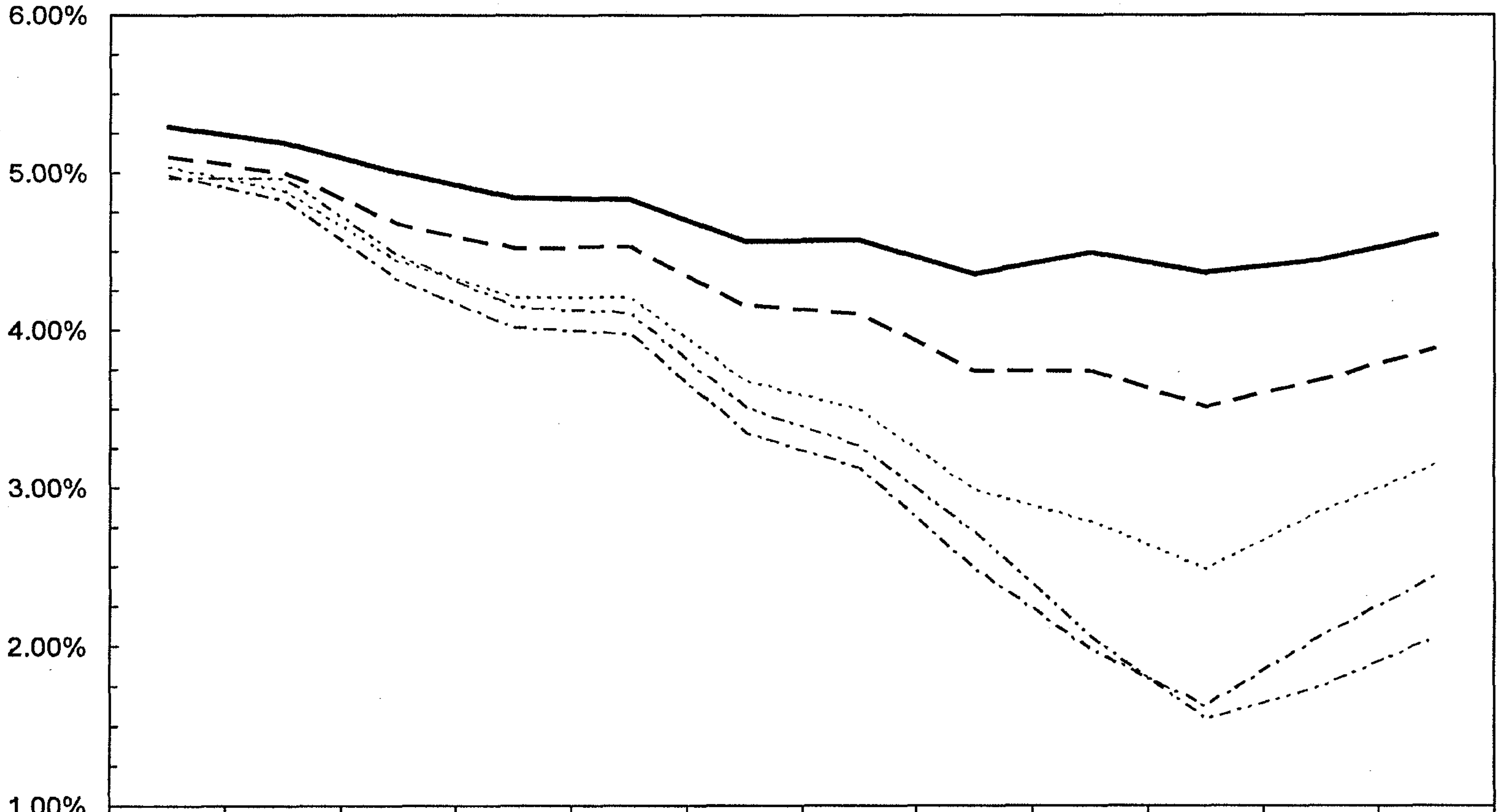
Value Line Betas

Electric Group

Alliant Energy	0.80
Ameren Corp.	0.80
CMS Energy Corp.	1.15
DTE Energy	0.75
Duke Energy	NMF
Empire District Electric Co.	0.85
FirstEnergy Corp.	0.80
Integrys Energy	0.80
MGE Energy	0.90
NiSource Inc.	0.90
Vectren Corp.	0.90
Wisconsin Energy	0.80
Xcel Energy Inc.	0.75
Average	0.85

Source of Information:
Value Line Investment Survey
March 28, May 9, May 30, 2008

Yields on
Treasury Notes & Bonds



	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
1-Year	4.96%	4.96%	4.47%	4.14%	4.10%	3.50%	3.26%	2.71%	2.05%	1.54%	1.74%	2.05%
2-Year	4.98%	4.82%	4.31%	4.01%	3.97%	3.34%	3.12%	2.48%	1.97%	1.62%	2.05%	2.43%
5-Year	5.03%	4.88%	4.43%	4.20%	4.20%	3.67%	3.49%	2.98%	2.78%	2.48%	2.84%	3.14%
10-Year	5.10%	5.00%	4.67%	4.52%	4.53%	4.15%	4.10%	3.74%	3.74%	3.51%	3.68%	3.88%
20-Year	5.29%	5.19%	5.00%	4.84%	4.83%	4.56%	4.57%	4.35%	4.49%	4.36%	4.44%	4.60%

Yields for Treasury Constant Maturities
Yearly for 2003-2007
and the Twelve Months Ended May 2008

Years	1-Year	2-Year	3-Year	5-Year	7-Year	10-Year	20-Year
2003	1.24%	1.65%	2.10%	2.97%	3.52%	4.02%	4.96%
2004	1.89%	2.38%	2.78%	3.43%	3.87%	4.27%	5.04%
2005	3.62%	3.85%	3.93%	4.05%	4.15%	4.29%	4.64%
2006	4.93%	4.82%	4.77%	4.75%	4.76%	4.79%	4.99%
2007	4.52%	4.36%	4.34%	4.43%	4.50%	4.63%	4.91%
Five-Year Average	3.24%	3.41%	3.58%	3.93%	4.16%	4.40%	4.91%
Months							
Jun-07	4.96%	4.98%	5.00%	5.03%	5.05%	5.10%	5.29%
Jul-07	4.96%	4.82%	4.82%	4.88%	4.93%	5.00%	5.19%
Aug-07	4.47%	4.31%	4.34%	4.43%	4.53%	4.67%	5.00%
Sep-07	4.14%	4.01%	4.06%	4.20%	4.33%	4.52%	4.84%
Oct-07	4.10%	3.97%	4.01%	4.20%	4.33%	4.53%	4.83%
Nov-07	3.50%	3.34%	3.35%	3.67%	3.87%	4.15%	4.56%
Dec-07	3.26%	3.12%	3.13%	3.49%	3.74%	4.10%	4.57%
Jan-08	2.71%	2.48%	2.51%	2.98%	3.31%	3.74%	4.35%
Feb-08	2.05%	1.97%	2.19%	2.78%	3.21%	3.74%	4.49%
Mar-08	1.54%	1.62%	1.80%	2.48%	2.93%	3.51%	4.36%
Apr-08	1.74%	2.05%	2.23%	2.84%	3.19%	3.68%	4.44%
May-08	2.05%	2.43%	2.69%	3.14%	3.45%	3.88%	4.60%
Twelve-Month Average	3.29%	3.26%	3.34%	3.68%	3.91%	4.22%	4.71%
Six-Month Average	2.23%	2.28%	2.43%	2.95%	3.31%	3.78%	4.47%
Three-Month Average	1.78%	2.03%	2.24%	2.82%	3.19%	3.69%	4.47%

Source: Federal Reserve statistical release H.15

Measures of the Risk-Free Rate

The forecast of Treasury yields
per the consensus of nearly 50 economists
reported in the Blue Chip Financial Forecasts dated June 1, 2008

Year	Quarter	1-Year Treasury Bill	2-Year Treasury Note	5-Year Treasury Note	10-Year Treasury Note	30-Year Treasury Bond
2008	Second	1.9%	2.2%	3.0%	3.8%	4.5%
2008	Third	2.0%	2.3%	3.1%	3.9%	4.5%
2008	Fourth	2.1%	2.3%	3.1%	3.9%	4.6%
2009	First	2.3%	2.5%	3.3%	4.1%	4.7%
2009	Second	2.5%	2.8%	3.5%	4.2%	4.8%
2009	Third	2.9%	3.0%	3.7%	4.4%	4.9%

Petitioner's Exhibit PRM-2
Northern Indiana Public Service Company
Cause No. 43526
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Schedule 11 [5 of 6]

File at the front of the *Ratings & Reports* binder. Last week's *Summary & Index* should be removed.

THE VALUE LINE Investment Survey®

Part 1 Summary & Index

June 6, 2008

TABLE OF SUMMARY & INDEX CONTENTS

SCREENS

The Median of Estimated
PRICE-EARNINGS RATIOS
of all stocks with earnings

16.4

26 Weeks Ago	Market Low 10-9-02	Market High 7-13-07
16.8	14.1	19.7

The Median of Estimated
DIVIDEND YIELDS
(next 12 months) of all dividend paying stocks under review

2.1%

26 Weeks Ago	Market Low 10-9-02	Market High 7-13-07
1.9%	2.4%	1.6%

The Estimated Median Price
APPRECIATION POTENTIAL
of all 1700 stocks in the hypothesized economic environment 3 to 5 years hence

70%

26 Weeks Ago	Market Low 10-9-02	Market High 7-13-07
55%	115%	35%

ANALYSES OF INDUSTRIES IN ALPHABETICAL ORDER WITH PAGE NUMBER

Numeral in parenthesis after the industry is rank for probable performance (next 12 months).

*Reviewed in this week's issue.

In three parts: This is Part 1, the Summary & Index. Part 2 is Selection & Opinion. Part 3 is Ratings & Reports. Volume LXIII, No. 41.

Published weekly by VALUE LINE PUBLISHING, INC. 220 East 42nd Street, New York, N.Y. 10017-5891

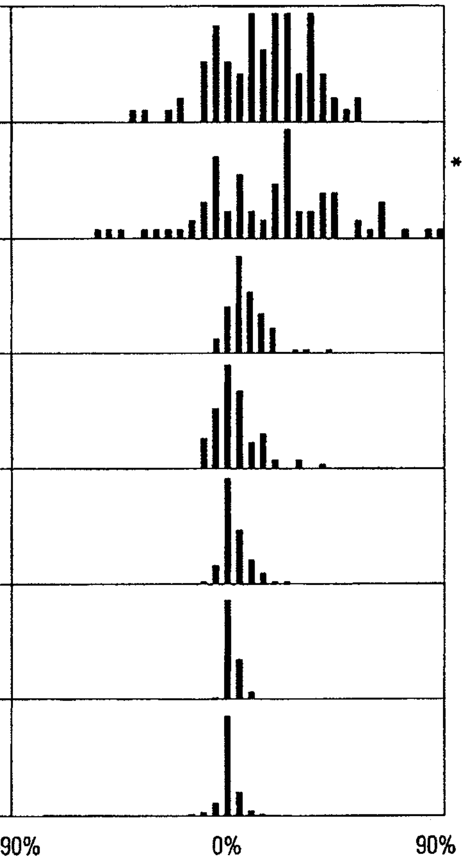
See back cover for important disclosures.

Petitioner's Exhibit PRM-2
Northern Indiana Public Service Company
Cause No. 43526
Page 27 of 29
Schedule 11 [6 of 6]

Table 2-1
Basic Series: Summary Statistics of Annual Total Returns

from 1926 to 2007

Series	Geometric Mean	Arithmetic Mean	Standard Deviation	Distribution
Large Company Stocks	10.4%	12.3%	20.0%	
Small Company Stocks	12.5	17.1	32.6	*
Long-Term Corporate Bonds	5.9	6.2	8.4	
Long-Term Government	5.5	5.8	9.2	
Intermediare-Term Government	5.3	5.5	5.7	
U.S. Treasury Bills	3.7	3.8	3.1	
Inflation	3.0	3.1	4.2	



*The 1933 Small Company Stocks Total Return was 142.9 percent.

Comparable Earnings Approach
Using Non-Utility Companies with
Timeliness of 2 & 3; Safety Rank of 1, 2 & 3; Financial Strength of B, B+, B++ & A;
Price Stability of 90 to 100; Betas of .75 to .90; and Technical Rank of 1, 2, 3 & 4

Company	Industry	Timeliness Rank	Safety Rank	Financial Strength	Price Stability	Beta	Technical Rank
Allstate Corp.	INSPRPTY	3	1	A	95	0.90	2
BOK Financial	BANKMID	3	2	B++	95	0.85	3
Campbell Soup	FOODPROC	3	2	B++	100	0.85	3
Capitol Fed. Fin'l	THRIFT	2	2	B++	90	0.80	2
Chubb Corp.	INSPRPTY	3	2	A	95	0.90	3
Cincinnati Financial	INSPRPTY	3	2	B++	100	0.85	3
Commerce Bancshs.	BANKMID	3	1	A	100	0.90	3
ConAgra Foods	FOODPROC	3	2	B++	95	0.80	2
Dentsply Int'l	MEDSUPPL	3	2	B++	95	0.75	3
Dun & Bradstreet	INFOSER	3	3	B	95	0.90	3
Gallagher (Arthur J.)	FINANCL	3	1	A	95	0.75	3
HCC Insurance Hldgs.	INSPRPTY	3	3	B+	90	0.80	3
Hormel Foods	FOODPROC	3	1	A	95	0.75	2
Int'l Flavors & Frag.	CHEMSPEC	3	2	B++	95	0.85	3
Int'l Speedway 'A'	RECREATE	3	3	B+	95	0.80	3
Omnicom Group	ADVERT	2	2	B++	95	0.90	3
Pepsi Bottling Group	BEVERAGE	3	3	B	90	0.75	4
PepsiAmericas Inc.	BEVERAGE	3	3	B	90	0.85	4
Pitney Bowes	OFFICE	3	2	A	100	0.85	3
Progressive (Ohio)	INSPRPTY	3	2	B++	90	0.80	3
Republic Services	ENVIRONM	3	2	B+	95	0.90	4
RLI Corp.	INSPRPTY	3	2	B++	90	0.80	4
Sara Lee Corp.	FOODPROC	3	2	B++	95	0.80	3
Schein (Henry)	MEDSUPPL	2	3	B+	90	0.80	3
Scripps (E.W.) 'A'	NWSPAPER	3	2	B+	95	0.85	3
Smucker (J.M.)	FOODPROC	3	2	B++	95	0.75	3
Speedway Motorsports	RECREATE	3	3	B	90	0.75	4
Transatlantic Hldgs.	REINSUR	3	2	B++	95	0.80	3
U.S. Bancorp	BANKMID	3	2	B++	95	0.90	2
United Parcel Serv.	AIRTRANS	3	1	A	100	0.75	3
Waste Connections	ENVIRONM	3	3	B+	95	0.90	4
Wiley (John) & Sons	PUBLISH	3	3	B+	90	0.80	2
Average		3	2	B++	94	0.83	3
Electric Group	Average	3	2	B++	95	0.85	3

Source of Information: Value Line Investment Survey for Windows, June 2008

Comparable Earnings Approach
Five -Year Average Historical Earned Returns
for Years 2003-2007 and
Projected 3-5 Year Returns

Company	2003	2004	2005	2006	2007	Average	Projected 2011-13
Allstate Corp.	12.9%	14.2%	8.7%	22.9%	21.2%	16.0%	15.0%
BOK Financial	12.9%	12.8%	13.1%	12.4%	11.6%	12.6%	12.0%
Campbell Soup	161.8%	74.7%	55.7%	38.5%	59.5%	78.0%	26.0%
Capitol Fed. Fin'l	5.3%	4.8%	7.5%	5.6%	3.7%	5.4%	8.5%
Chubb Corp.	8.8%	13.8%	12.7%	17.1%	18.0%	14.1%	11.0%
Cincinnati Financial	6.2%	8.4%	9.2%	7.3%	10.5%	8.3%	8.0%
Commerce Bancshs.	14.2%	15.4%	16.7%	15.2%	13.5%	15.0%	11.5%
ConAgra Foods	18.2%	16.4%	14.5%	12.8%	14.9%	15.4%	17.0%
Dentsply Int'l	15.4%	13.6%	17.4%	17.7%	16.9%	16.2%	18.0%
Dun & Bradstreet	NMF	NMF	NMF	NMF	NMF	-	NMF
Gallagher (Arthur J.)	26.7%	24.8%	39.9%	15.9%	21.6%	25.8%	21.5%
HCC Insurance Hldgs.	13.7%	11.8%	11.4%	16.8%	16.0%	13.9%	11.0%
Hormel Foods	14.8%	15.6%	16.1%	15.9%	15.8%	15.6%	16.0%
Int'l Flavors & Frag.	26.9%	21.5%	20.1%	23.6%	38.2%	26.1%	31.0%
Int'l Speedway 'A'	15.0%	14.7%	15.3%	15.0%	13.1%	14.6%	10.5%
Omnicom Group	19.5%	17.7%	20.0%	22.3%	23.8%	20.7%	25.5%
Pepsi Bottling Group	22.4%	23.4%	22.8%	21.9%	19.5%	22.0%	14.5%
PepsiAmericas Inc.	9.8%	10.8%	12.0%	10.7%	11.5%	11.0%	13.0%
Pitney Bowes	52.3%	46.0%	48.1%	86.8%	93.5%	65.3%	89.0%
Progressive (Ohio)	24.8%	31.0%	22.8%	24.1%	24.0%	25.3%	20.0%
Republic Services	11.3%	12.7%	15.8%	19.7%	24.2%	16.7%	22.5%
RLI Corp.	10.6%	10.3%	14.0%	14.5%	18.5%	13.6%	11.0%
Sara Lee Corp.	59.1%	43.1%	36.8%	29.2%	20.5%	37.7%	25.5%
Schein (Henry)	13.9%	12.3%	13.2%	12.4%	13.2%	13.0%	16.5%
Scripps (E.W.) 'A'	13.6%	13.8%	13.6%	15.4%	NMF	14.1%	13.0%
Smucker (J.M.)	10.0%	8.9%	9.0%	9.2%	10.0%	9.4%	10.5%
Speedway Motorsports	12.4%	12.7%	14.1%	13.6%	11.2%	12.8%	12.0%
Transatlantic Hldgs.	10.1%	9.3%	0.5%	14.2%	14.4%	9.7%	9.5%
U.S. Bancorp	19.3%	21.3%	22.3%	22.4%	20.5%	21.2%	19.5%
United Parcel Serv.	18.9%	19.8%	22.9%	27.1%	35.9%	24.9%	30.0%
Waste Connections	12.2%	10.9%	11.9%	11.0%	12.8%	11.8%	17.0%
Wiley (John) & Sons	20.7%	23.0%	23.9%	17.8%	19.0%	20.9%	19.0%
Average						20.2%	18.9%
Median						15.4%	16.0%

Kelly

Petitioner's Exhibit JPK-1

NORTHERN INDIANA PUBLIC SERVICE COMPANY

IURC CAUSE NO. 43526

VERIFIED DIRECT TESTIMONY

OF

JOHN P. KELLY
EXECUTIVE ADVISOR
CONCENTRIC ENERGY ADVISORS

SPONSORING PETITIONER'S EXHIBITS JPK-2 THROUGH JPK-7

VERIFIED DIRECT TESTIMONY OF JOHN P. KELLY

Q1. Please state your name, job title, affiliation, and business address.

A1. My name is John P. Kelly. I am an Executive Advisor for Concentric Energy Advisors, Inc. ("Concentric") located at 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts, 01752. I am a registered professional engineer, a certified real estate appraiser and a specialist in asset valuation.

Q2. On whose behalf are you submitting this direct testimony?

A2. I am submitting this testimony on behalf of Northern Indiana Public Service Company ("NIPSCO" or the "Company"). Concentric was engaged by NIPSCO to perform a study of the fair value of its electric generation, transmission, distribution and general plant.

Q3. Please describe the nature of the services provided by Concentric.

A3. Concentric provides consulting services to utilities, energy producers, major energy consumers, project developers, and governmental authorities throughout North America. The firm specializes in transaction-related financial advisory services, valuation studies, economic feasibility studies, energy market and regulatory strategies, market assessments, energy commodity contracting and procurement, regulatory and litigation support, and capital market analyses and negotiations.

Q4. Please describe your professional experience.

A4. Prior to my current position at Concentric, I was a Director of Navigant Consulting, Inc. Before that, I was employed at Stone & Webster, Inc., most recently serving as Vice President and Director of Stone & Webster Management Consultants and Assistant Vice

President of Stone & Webster Engineering Corporation. I have over 40 years of experience in valuations and studies of public utility and industrial properties for rate-making, purchase and sale considerations, eminent domain/condemnation, ad valorem tax assessments, insurance, accounting and financial purposes. I have provided expert testimony on valuation matters in more than 60 cases before state utility commissions, federal and state courts, and administrative bodies throughout the United States. A summary of my professional experience and educational background is attached as <u>Petitioner's Exhibit JPK-2</u>.

Q5. What are your responsibilities as an Executive Advisor at Concentric?

A5. I manage projects involving the valuation of utility property.

Q6. What is the purpose of your testimony?

A6. The purpose of my testimony is to address the current value of NIPSCO's electric utility assets and to describe the valuation study upon which my analysis and conclusions are based.

Q7. Have you previously testified before this Commission on the value of NIPSCO's electric utility assets?

A7. Yes. I testified for NIPSCO on this subject in 2001 in Cause No. 41746 and in 1986 in Cause No. 38045.

Q8. What conclusion have you reached regarding the current value of NIPSCO's electric utility assets?

A8. In my opinion, the value of NIPSCO's electric utility assets, as of December 31, 2007, is approximately $6.86 billion, as measured by the replacement cost of the property less depreciation ("RCNLD").

Q9. Please describe NIPSCO's generation assets that were included in your analysis.

A9. My analysis includes all of the NIPSCO generation facilities except the DH Mitchell generating station and Michigan City Units 2 and 3 which NIPSCO proposes to retire and the Sugar Creek combined cycle combustion turbine generating facility that NIPSCO acquired after December 31, 2007. The generation assets included in my valuation represent 2,770 MW of capacity. Of the total capacity, 92.4% is from coal-fired units, 7.3% is from natural gas-fired units and 0.3% is from hydroelectric units. The specific generation assets valued by Concentric are identified in Table 1 below.

Table 1: NIPSCO Generation Assets

Description	Primary Fuel	Capacity (MW)
Bailly 7	Coal	160
Bailly 8	Coal	320
Bailly 10	Natural Gas	31
Michigan City 12	Coal	469
Schahfer 14	Coal	431
Schahfer 15	Coal	472
Schahfer 16a	Natural Gas	78
Schahfer 16b	Natural Gas	77
Schahfer 17	Coal	361
Schahfer 18	Coal	361
Norway	Hydro	4
Oakdale	Hydro	6
Total		2770

Q10. Please describe NIPSCO's transmission assets.

A10. As is discussed in greater detail by NIPSCO Witness Timothy A. Dehring, the NIPSCO electric transmission system consists of 354 circuit miles of 345kV, 763 circuit miles of 138kV and 1,651 circuit miles of 69kV totaling 2,278 circuit miles of transmission. In addition, NIPSCO has 51 transmission substations. NIPSCO is interconnected with five utilities: American Electric Power ("AEP"); Commonwealth Edison; Duke Energy Indiana; Ameren; and International Transmission Company ("ITC"). The total interconnection capability for NIPSCO is 13,054 megavolt-ampere ("MVA").

Q11. Please describe NIPSCO's distribution assets.

A11. As is described in greater detail by Mr. Dehring, as of December 31, 2007, NIPSCO's distribution system consisted of more than 800 distribution circuits, 250 distribution substations, more than 8,000 miles of overhead line, with about 2,100 miles of underground cable.

Q12. Please describe NIPSCO's general plant assets.

A12. NIPSCO's general plant accounts include those assets that are not defined by the Federal Energy Regulatory Commission ("FERC") Uniform System of Accounts as appropriate to include in other plant accounts. More specifically, these accounts contain the following categories of assets not elsewhere classified:

- Land and land rights;
- Structures and improvements;
- Transportation equipment including automobiles, trucks and appurtenant equipment;

- Stores, shop and laboratory equipment;
- Power operated equipment that is self-propelled or mounted on moveable equipment; and
- Communication equipment.

Q13. What is the basis of the appraisal?

A13. The appraisal develops the value of NIPSCO's electric plant in service as of December 31, 2007, on the basis of the cost to construct the property new less existing depreciation. The construction cost new was determined by applying cost trend factors to the original costs. Deductions for depreciation reflect the relative loss in value due to physical and functional causes. The depreciation deductions have been determined by inspection, engineering processes, and judgment based on experience.

Q14. How did you carry out your appraisal work?

A14. The appraisal procedure consisted of four steps: (1) the development of current costs of the properties by the trending of original costs; (2) a determination of physical and functional depreciation involving field inspection, analysis of NIPSCO's records and statistics, and various other calculations; (3) the application of depreciation factors to the current costs; and (4) the final assembly of the appraisal and supporting data, including preparation for this proceeding.

Q15. What are some of the records about the Company's electric properties that you reviewed in order to develop an opinion as to their value?

A15. I reviewed an extensive amount of information about NIPSCO's electric utility assets including the Company's continuing property records, FERC Form No. 1, capital budgets, programmed maintenance guidelines and schedules, proposed useful lives, and selected portions of the Company's 2007 Integrated Resource Plan.

Q16. Have you physically inspected the assets?

A16. Yes. I have physically inspected NIPSCO's facilities from the standpoint of preparing an estimated valuation of the facilities based on the general operating characteristics of the facilities. As part of the valuation, I have discussed the operations of the facilities with Company personnel to determine whether there are any material factors that would need to be considered as part of the overall valuation.

Q17. What was the extent of your field inspection that led to the determination of depreciation?

A17. The field inspection involved a physical inspection of all of the Company's production plant, a sampling of transmission lines, substations and transmission and distribution lines throughout the system as well as a service center. This enabled me to determine the current condition of the assets. During each of the inspection tours, I conducted interviews with Company personnel regarding operating and maintenance procedures as well as plans for ongoing and future system improvements.

Q18. Please indicate when you inspected NIPSCO's electric facilities and describe your observations regarding the condition and usefulness of the facilities.

A18. Physical inspections were conducted during the week of May 12, 2008. It is my general conclusion that the physical plant and properties in service are well designed and consist of modern equipment and quality material, that the properties are being maintained and operated on a coordinated and efficient basis, and that for the foreseeable future, the properties can continue to operate effectively for the purposes for which they have been designed and constructed.

Q19. In your opinion have you studied NIPSCO's electric utility assets in sufficient detail to render an opinion as to their value based on the RCNLD?

A19. Yes.

Q20. What approach did you use to value NIPSCO's electric utility assets?

A20. I determined the value of NIPSCO's electric utility assets using the Current Cost Approach.

Q21. Please explain how the Current Cost Approach is generally used to value assets.

A21. There are generally two ways in which the Current Cost Approach can be conducted (1) determining the cost of reproducing a duplicate asset using the same material and design at current prices, less loss in value from depreciation ("Reproduction Cost Method") or (2) determining the cost of replacing the subject asset at current prices with an economical and efficient present day functional equivalent, less loss in value from depreciation ("Replacement Cost Method").

Q22. The Reproduction Cost Method and Replacement Cost Method both use costs at current prices. Would either gross original cost or original cost less accounting depreciation (*i.e.*, net original cost) also be a valid measure of the value of NIPSCO's electric utility assets?

A22. No. Original cost represents the historical cost incurred when the assets were originally constructed or acquired. Due to inflation, the cost to reproduce or replace assets today will be substantially different. NIPSCO's electric utility system has been constructed over many years and the original cost of the electric utility assets is well below the value of the assets today.

Q23. Will the Reproduction Cost Method and Replacement Cost Method ever produce the same result?

A23. Yes. If an asset would be replaced today in substantially the same form as currently exists, the reproduction cost and replacement cost would be the same.

Q24. How did you apply the Current Cost Approach in valuing NIPSCO's electric utility assets?

A24. I sought to determine the replacement cost less depreciation of NIPSCO's electric utility properties. To the extent I concluded the assets would be replaced today in substantially the same form, I utilized the Reproduction Cost Method because that method would also derive the replacement cost. In cases where I concluded assets would be replaced in a different form, I made adjustments to the reproduction cost results to derive a reasonable replacement cost.

Q25. Please explain how the Reproduction Cost Method is applied.

A25. The Reproduction Cost Method takes the original cost, by vintage, of each electric utility plant account and then applies an adjustment factor (or multiplier) to each vintage of each account to determine the cost to reproduce those assets in today's dollars. This value is commonly referred to as the Reproduction Cost New of the assets. The adjustment factor or multiplier is utilized to account for the cost of those electric utility assets that a third party would have to expend currently if it were to reproduce the electric utility system as it is currently constructed.

Q26. To determine the Reproduction Cost New you need original cost information for each plant account by vintage year. Does NIPSCO have such plant account information in sufficient detail?

A26. Yes. NIPSCO maintains its electric plant property records according to the FERC Uniform System of Accounts, by vintage year. These records are the source of the original cost information used in my valuation and were sufficient to conduct my Reproduction Cost Study of NIPSCO's electric utility assets.

Q27. How have you determined the replacement cost of NIPSCO's electric utility assets?

A27. I first calculated the Reproduction Cost New for each account, by vintage, for all of the electric utility assets. I then made a downward adjustment to reflect loss in service value due to the age and the condition of the assets. As part of this adjustment, I considered what assets would be replaced today with functionally-equivalent but different assets.

Q28. Please describe Petitioner's Exhibits JPK-3 through JPK-7.

A28. Petitioner's Exhibit JPK-3 provides a summary of the Original Cost, Reproduction Cost New and RCNLD of the Company's Electric Plant in Service at December 31, 2007. In addition, Petitioner's Exhibit JPK-3 provides a summary of the value of the Electric Plant in Service at December 31, 2007 with Mr. Reed's DCF values substituted for my RCNLD values for the production plant assets.

Petitioner's Exhibit JPK-4 provides a summary of the RCNLD by FERC account. The total RCNLD value of Steam Production Plant at December 31, 2007 is $2,723,091,286. The difference between the Reproduction Cost New and the RCNLD is depreciation.[1]. As is shown on page 1 of Petitioner's Exhibit JPK-4, the indicated existing depreciation for Steam Production Plant is approximately 57 percent. The RCNLD for the remainder of the property is shown on pages 2 through 3 of Petitioner's Exhibit JPK-4. The total RCNLD value of Hydroelectric Production Plant is $16,096,016 and existing depreciation is approximately 75 percent. The total RCNLD value of Other Production Plant is $66,280,094 and existing depreciation is approximately 46 percent. The total RCNLD value of Transmission Plant is $1,444,788,084 and the existing depreciation is approximately 32 percent. The total RCNLD value of Distribution Plant is $2,166,577,167 and existing depreciation is approximately 38 percent. The total RCNLD value of General Plant is $94,897,824 and the existing depreciation is approximately 58 percent. The total RCNLD value of Common Plant (allocated to the electric utility) is

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[1] The depreciation of production plant is measured by the difference between the Reproduction Cost New and the Replacement Cost New Less Depreciation and represents physical and functional depreciation. Economic depreciation is normally captured through the use of an income approach.

$326,635,365 and existing depreciation is approximately 24 percent. The total RCNLD value of Electric Plant in Service at December 31, 2007 is $6,864,797,377.

Petitioner's Exhibit JPK-5 shows the Reproduction Cost New by FERC account by vintage year for the total Electric Plant in Service at December 31, 2007. Petitioner's Exhibit JPK-6 provides a summary of the RCNLD value for Common Plant by FERC account and provides the allocation of Common Plant to the electric and gas utilities for the original cost and the current cost of each Common Plant account. The allocations are based on the Company's allocation of 71.26% electric plant and 28.74% gas plant as reported in the Company's FERC Form No. 1 filing.[2] Finally, Petitioner's Exhibit JPK-7 shows the Reproduction Cost New for the Company's Common Plant by FERC account and vintage year.

Q29. Please explain the development of the current cost amounts.

A29. The current cost amounts have been developed by the trended original cost method. This method consists of the development of adjustment factors from appropriate cost indices for application to the original costs by years of installation to obtain the current cost as of December 31, 2007.

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[2] Common Plant for FERC Account 303 was allocated using a split allocation method. The Total amount of $75, 671,112 was allocated 38.99 percent to electric and the remaining 61.01 percent to the gas system. The remaining balance of Account 303 was allocated as discussed above.

Q30. How are the adjustment factors that are applied to the original costs, by vintage year, in each account determined?

A30. For the majority of NIPSCO's electric utility asset accounts, I utilized the Handy-Whitman Index of Public Utility Construction Costs ("Handy-Whitman Index") to determine the present day reproduction costs for each vintage of assets. The Handy-Whitman Index is a generally accepted industry standard for conducting reproduction cost studies. The Handy-Whitman Index is considered an accurate and reliable resource for valuation experts, has a long history of providing dependable data, and has been published continuously since 1924 by Whitman, Requardt and Associates, an engineering firm.

Q31. For what purposes is the Handy-Whitman Index commonly used?

A31. The Handy-Whitman Index has been used and is generally accepted for rate setting purposes, as well as for many other purposes. For example, it has been used to value utility property for sale purposes, to perform stock valuations, and to make ad valorem tax calculations. In addition, the Handy-Whitman Index has been used for insurance purposes and for engineering estimates of new construction project costs.

Q32. How long have you used the Handy-Whitman Index to value utility property?

A32. I have utilized the Handy-Whitman Index throughout my career as part of my valuation assignments. Based on my experience, the Handy-Whitman Index is a reliable tool to use in valuing utility property, including NIPSCO's electric utility system.

Q33. How does the Handy-Whitman Index account for changes in construction costs over time?

A33. The Handy-Whitman Index has tracked utility labor, materials and equipment costs over time and has developed indices that reflect the percentage change in the cost of goods in most utility plant accounts for every year from 1912 through the present. Specifically, the Handy-Whitman Index provides a cost index for every year for different types of utility assets as compared to a base year of 1973. For example, if certain assets purchased in 1973 had an index cost of 100, assets purchased in 1923 may have an index of 20, while assets purchased in 2002 may have any index of 220. Using the Handy-Whitman Index, the adjustment factor is calculated by dividing the index for the most recent period by the index for the vintage of the property in question. Therefore, in this example, the adjustment factor for the assets installed in 1923 would be 11 (*i.e.*, the 2002 index of 220 divided by the 1923 index of 20). For property installed in 1973, the adjustment factor would be 2.2 (220 divided by 100).

Q34. Please provide an example explaining how you used the Handy-Whitman Index to calculate the Reproduction Cost New of the assets in Account No. 352 Structures and Improvements.

A34. As shown in Petitioner's Exhibit JPK-5, pages 21-22, NIPSCO installed Account No. 352 transmission and distribution property in years spanning 1935 through 2007. First, the vintage and original cost of this property is shown in columns (d) and (e), respectively. These figures are taken directly from NIPSCO's property records. Second, the adjustment factor for each vintage of each account is shown in column (f). The adjustment factors for Account No. 352 are calculated as I have described. For example, the Handy-Whitman Index provides a 1950 cost index for Account No. 352 property of 40, and a January 1, 2008 cost index for the same property of 510.5. The adjustment factor for Account No. 352 property installed in 1950 of 12.76 is calculated by dividing the January 1, 2008 cost index by the 1950 cost index (510.5 divided by 40). Lastly, the Reproduction Cost New value for each vintage of Account No. 352 is found in column (g) and is calculated by multiplying the original cost by the adjustment factor.

Q35. Do the adjustment factors from the Handy-Whitman Index you used apply to the area in which NIPSCO's electric utility assets are located?

A35. Yes. The Handy-Whitman Index provides separate adjustment factors for various parts of the United States in order to reflect the differences in regional cost changes. In my analysis, I utilized the figures from the Handy-Whitman Index for the North Central region of the United States, which includes Indiana.

Q36. What is the date as of which the Handy-Whitman Index used in your study is applicable?

A36. The data I used from the Handy-Whitman Index is as of January 1, 2008. The January 1, 2008 published numbers were adopted as being reflective of the price levels at December 31, 2007.

Q37. In your opinion is the Handy-Whitman Index reasonably applicable to NIPSCO's electric utility properties in service as of December 31, 2007?

A37. Yes, for the reasons I explained above, the indices are applicable.

Q38. Did you utilize the Handy-Whitman Index for all of NIPSCO's accounts?

A38. No. There were two (2) primary instances in which the Handy-Whitman Index did not provide the necessary information. First, the Handy-Whitman Index does not provide data on the value of land or easements. For land, land rights and easements, I utilized index numbers of Indiana farm real estate compiled by the United States Department of Agriculture.

Second, the Handy-Whitman Index does not have reproduction cost information covering all of NIPSCO's general asset accounts. In those instances, I utilized the percent changes stated in the Bureau of Labor Statistics' Producer Price Index ("PPI") as a proxy for the cost changes in those assets over time. Similar to the Handy-Whitman Index, the Bureau of Labor Statistics tracks price changes for various asset categories, including those assets for which there is no information available from the Handy-Whitman Index. Because the Bureau of Labor Statistics does not calculate PPI back far enough to cover all vintages of NIPSCO's assets, I used the PPI for the vintages for which there was data, and utilized the percent changes in Gross Domestic Product ("GDP") as a proxy for those vintages for which there was no PPI available from the Bureau of Labor Statistics.

Q39. Did the use of the PPI and GDP to calculate the percent changes in the cost of certain vintages of general plant assets have a significant impact on the overall results?

A39. No. First, there were very few accounts that the Handy-Whitman Index did not cover. Second, the amount of dollars in the accounts for which I utilized PPI and/or GDP were small compared to the amount of dollars in the accounts covered by the Handy-Whitman Index. Therefore, these assumptions had a relatively small impact on the overall results of my study.

Q40. What was the next step in your appraisal procedure?

A40. In the next step, I determined the depreciation allowances to be applied to current cost.

Q41. How can the allowances for depreciation be determined from Petitioner's Exhibit JPK-3 and Petitioner's Exhibit JPK-4?

A41. The allowance for depreciation can be determined for each account by subtracting the RCNLD from the Reproduction Cost New.

Q42. Please provide an example showing how the amount of depreciation can be determined for a generating station.

A42. On page 1 of Petitioner's Exhibit JPK-4, the total Reproduction Cost New of the Schahfer Station Production Plant is shown to be $ 4,053,198,889 and the RCNLD is shown to be $1,933,110,100. The amount of depreciation is the difference between these two amounts - $2,120,088,789.

Q43. Please explain how you determined the depreciation of Production Plant.

A43. Determination of the depreciation associated with the Production Plant involved comparisons of the current cost and replacement cost of the existing plant to a new plant of similar technology. In this analysis, I calculated the cost of replacing the subject asset at current prices with the cost of its functional equivalent, less loss in value from depreciation. Losses in value attributable to physical and functional causes can be quantified by the extent to which such losses affect the annual cost and level of production.

Q44. How did you calculate the cost of a new facility?

A44. I developed the cost of a new functionally-equivalent unit based on the construction cost of either a new scrubbed coal facility, or a new combustion turbine facility, as reported by the Energy Information Administration in its 2008 Annual Energy Outlook.

Q45. How did you use these data to derive your estimate of depreciation?

A45. The comparison of the construction cost and operating and maintenance characteristics of an alternative facility to the existing facility combines the measurement of physical and functional depreciation. Physical and functional curable depreciation (depreciation that can be repaired) are appropriately reflected in the level of capital expenditures forecasted as well as the differential in non-fuel operating and maintenance expenses. Physical incurable depreciation (depreciation that is beyond repair) is accounted for in the remaining life component of the analysis. Functional incurable depreciation is reflected in the lower capital cost and related annual cost of the replacement facility. The fuel cost advantage is reflected in the operating cost comparisons. Using the Schahfer steam production facility[3] as an example, the Reproduction Cost New, excluding land, is $4,038,466,565 (as shown on Petitioner's Exhibit JPK-4). The cost of the new facilities was calculated to be $2,645,326,242. Therefore, the functional depreciation attributable

[3] This example uses the value of Schahfer Steam Production Plant.

to lower capital cost of the Schahfer facility would be $1,393,140,323 ($4,038,466,565 minus $2,645,326,242).

Further, depreciation is calculated by comparing the cost of operating and maintaining a new facility to the cost of operating and maintaining the existing facility. This comparison provides a measure of the relative condition of the existing facility. The cost of service includes the annual fixed charges, which relate to investment in the plant, and the annual operating costs. The fixed charges consist of depreciation, return, and taxes. In making this comparison, the current annual operating cost is deducted from the total cost of service of the subject plant as if it were in new condition and the resulting balance is the amount available for fixed charges. This amount, capitalized by the fixed charges rate, is the value of the existing facility. Using the Schahfer facility as an example, the replacement cost analysis produces a value of the facility of $1,918,377,777. The difference between this value and the cost to construct a new facility is primarily attributed to physical depreciation. For the Schahfer facility, this component of depreciation is $726,948,465 ($2,645,326,242 minus $1,918,377,777).

Q46. Was this approach used to determine the depreciation for all Production Plant?

A46. Yes. The RCNLD value of all Production Plant as of December 31, 2007 was developed using this approach. The Reproduction Cost New of Production Plant in Service (including Steam, Hydroelectric and Other Production Plant) at December 31, 2007 was $6,505,478,939 and the RCNLD value is $2,805,467,396.[4]

Q47. How did you determine what technology was appropriate to use in the comparison of each NIPSCO generation unit to a new generating unit?

A47. The new generation asset was selected based on the function of the existing asset. Those units that could be used in base load or intermediate service were compared to coal plants and those units that would normally be used in peaking service were compared to combustion turbines. As a result, all of the existing coal fired plants were compared to the cost of new coal plants and the hydroelectric plants and combustion turbines were measured against the cost of current combustion turbine technology.

Q48. How did you determine the Reproduction Cost New Less Depreciation of the existing NIPSCO generation facilities?

A48. The current costs that I relied upon in my replacement cost analysis are consistent with the cost data developed and relied upon by NIPSCO Witness John J. Reed in his DCF analysis. As Mr. Reed discusses, he conducted a DCF analysis for each of the NIPSCO generating units. In developing his analysis, Mr. Reed projected annual generation, operating costs and capital expenditures over the operating life of each of NIPSCO's existing units. In developing my replacement cost analysis, I relied on this data developed by Mr. Reed to estimate the cost of service for the generation units. As discussed previously, these projected costs of the existing facility were then deducted

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[4] As noted in Petitioner's Exhibit JPK-4, Total Production Plant excludes the D.H. Mitchell facility and Michigan City Units 2 and 3 because NIPSCO intends to retire these assets.

from the cost of service for a new facility to determine the amount available to support an investment in the asset over each year that the existing assets are projected to be operating. This annual amount was then discounted to the present value using the weighted average cost of capital rate of 9.0% derived by Mr. Reed in his direct testimony, resulting in the total value of the NIPSCO production assets using the Replacement Cost Method.

Q49. Did your analysis take into consideration any other expenses?

A49. Yes, my analysis considered Administrative and General Expenses as well as the projected cost of carbon regulation. In my analysis I assumed that the new facilities and the existing facilities would incur these costs. Therefore, the effect of Administrative and General Expenses and projected carbon regulation do not influence the results of this analysis.

Q50. Please explain your determination of depreciation for Transmission Plant as shown on page 3 of <u>Petitioner's Exhibit JPK-4</u>.

A50. The necessary adjustment to reflect the age and condition of the assets was essentially conducted in three steps. The first step was to determine the average service life for each asset account. I based the average service life for each asset account on the depreciation study being sponsored by NIPSCO Witness John J. Spanos in this proceeding (the "Depreciation Study").

The second step was to calculate the estimated remaining useful life of the assets in each account. After obtaining the average service life for each account, I then calculated an average weighted age of the assets in each account based on the present dollars of those assets by vintage as calculated in the Reproduction Cost Study described above.

For the third step, I determined the condition percent of the assets in each account. This determination is based on the "Condition-Percent Tables for Depreciation of Unit and Group Properties" by Robley Winfrey, published by Iowa State University. Robley Winfrey was one of the foremost authorities in the depreciation field and one of the originators of the Iowa survivor curves used in almost all depreciation rate studies. His Condition-Percent Tables are well-accepted by valuation experts for purposes of determining the physical and functional depreciation experienced by an asset. The condition percent of the assets in each account is calculated by dividing the present value of the benefits of those same assets based on their remaining useful life by the present value of the benefits of the assets in each account based on their full average service life.

Q51. What was the total depreciation for Transmission Plant in amount and percentage as related to the Reproduction Cost New?

A51. The total depreciation can be calculated using the figures on page 3 of Petitioner's Exhibit JPK-4. The total depreciation for Transmission Plant is the difference between the Reproduction Cost New of $2,133,974,442 and the RCNLD of $1,444,788,084, or $689,159,358. This constitutes approximately 32 percent depreciation.

Q52. Have you considered whether further adjustment is necessary to the cost that would be incurred today in constructing NIPSCO's Transmission Plant?

A52. Yes, I have considered such a deduction. With respect to NIPSCO's Transmission Plant, the facilities are, in general, constructed with materials that are the current standard in the industry. There are, however, a number of additional costs, which would be incurred if the facilities were constructed under current conditions. Many existing transmission routes would not be feasible under current regulations, and as a practical matter, some of the existing transmission lines could not be constructed today. Many of these lines are built in areas that are today classified as wetlands, environmentally sensitive, or are densely populated. Even routes that are acceptable under current regulations would likely face local community opposition if the attempt was made to establish them today. In general, transmission line rights-of-way purchased very economically in the past would be orders of magnitude more costly today.

Transmission facilities that are constructed under current conditions face costs that were not necessary when many of the existing lines were installed. In addition to the increased costs of planning, environmental impact studies, permitting, and right-of-way acquisition already outlined above, there are costs incurred because of the need to minimize the environmental impact of construction. This was not a major consideration or cost in the past. In particular, wetlands and other protected areas require special engineering and construction techniques that lead to delays and increased cost. For example, construction sites must take steps to guard against sediment runoff, erosion, and chemical spills. All of these items add to the cost of constructing a transmission line today compared to the cost of constructing a transmission line when many of NIPSCO's lines were actually built. I have concluded in my appraisal, therefore, that the current cost less depreciation of NIPSCO's Transmission Plant is conservative and requires no further reduction due to current construction conditions or piecemeal construction.

Q53. Please explain your determination of depreciation for Distribution Plant as shown on page 3 of <u>Petitioner's Exhibit JPK-4</u>.

A53. The analysis that I performed to determine the depreciation for Distribution Plant was similar to that which was done in the calculation of depreciation of Transmission Plant. First, I based the average service life for each asset account on the Depreciation Study (sponsored by Mr. Spanos). Next, I calculated the estimated remaining useful life of the assets in each account and an average weighted age of the assets in each account based on the present dollars of those assets by vintage as calculated in the Reproduction Cost Study described above. Finally, I determined the condition percent of the assets in each account using the "Condition-Percent Tables for Depreciation of Unit and Group Properties" by Robley Winfrey.

Q54. In your analysis, have you considered whether any further adjustment is necessary to reflect the cost that would be incurred today in constructing NIPSCO's Distribution Plant?

A54. Yes, I have. However, many of the same problems that affect the construction of transmission lines also afflict the construction of distribution plant, but to a lesser degree. In addition, the design and construction of distribution plant today has its own areas of increased cost related to rights-of-way and underground construction costs the Company did not face when the existing system was originally constructed. Therefore, I concluded that no further reduction in the current cost new less depreciation is necessary for NIPSCO's Distribution Plant due to current construction conditions or piecemeal construction.

Q55. What are the overall results of the valuation for Distribution Plant as shown on page 3 of <u>Petitioner's Exhibit JPK-4</u>?

A55. As can be calculated using the figures on page 3 of <u>Petitioner's Exhibit JPK-</u>4, the Total Replacement Cost for Distribution Plant is $3,477,578,384 and the RCNLD is $2,166,577,167. The overall depreciation for Distribution Plant is $1,311,001,217 which constitutes approximately 38 percent depreciation.

Q56. Please explain your determination of depreciation allowances for the various items of General Plant.

A56. The approach taken to determine the depreciation of the General Plant accounts is consistent with the approach used to determine the depreciation of the Transmission and Distribution property.

Q57. What was the total depreciation you applied to General Plant property?

A57. As can be calculated using the figures on page 4 of <u>Petitioner's Exhibit JPK-4</u>, the total depreciation allowance for General Plant is the amount of $228,157,949 less $94,897,824, or $133,260,125. This constitutes approximately 58 percent depreciation.

Q58. Please explain your determination of depreciation allowances for the various items of Common Plant.

A58. The items listed under Common Plant are virtually the same types of items as those listed under General Plant. The depreciation allowances for these accounts were made in the same manner as were those for General Plant. The range of estimated depreciation allowances extended from 17.5 percent to 79 percent for the various accounts.

Q59. What was the total depreciation you applied to Common Plant property?

A59. As can be calculated using the figures on page 3 of Petitioner's Exhibit JPK-4, the depreciation amount for Common Plant is the RCN amount of $428,446,655 less the RCNLD of $326,635,365 or $101,811,289 which constitutes 24 percent depreciation.

Q60. What are the results of your appraisal of the Company's Electric Plant in Service as of December 31, 2007?

A60. The results of my replacement cost study of NIPSCO's utility assets are shown in Petitioner's Exhibit JPK-3. The Reproduction Cost New of Electric Plant in Service at December 31, 2007 is $12,800,067,910. The RCNLD is $6,864,797,377.

Q61. Are you aware that production plant has also been valued by Mr. Reed?

A61. Yes.

Q62. How does your analysis of the value of NIPSCO's Production Plant differ from the analysis presented by Witness Reed?

As I have discussed previously, my opinion of value is based on the Cost Approach to value. For the Production Plant, I have relied on a Replacement approach to determine the RCNLD of the assets. In this approach, I rely on the cost of constructing new production plants of similar fuel type to the existing assets. I compare the cost of operating the new plant to the cost of operating the existing plant in order to develop the value of the existing assets.

Mr. Reed uses the income approach to determine a value for the Production Plant assets. As is discussed in more detail in his testimony, Mr. Reed's income approach was developed from the perspective of a third party purchaser valuing the assets at the present value of the projected after tax operating cash flow that would be generated by each of the NIPSCO generation assets during their remaining useful lives, assuming also that their electric energy were to be sold at market-based prices.

These methodologies are conceptually different and as such, the analyses produce different results.

Q63. Please explain why there is a difference between your value of Production Plant and Mr. Reed's value of Production Plant.

A62. The difference between these two values is the result of differences in the depreciation that is considered through these two approaches. As I have discussed in my testimony, the RCNLD measures physical depreciation based on age and the remaining life of the assets. Functional depreciation is measured by comparing the existing production assets with new, production assets capable of performing the same function and built with modern materials and with modern design. The combination of these two forms of depreciation are the difference between the Reproduction Cost New and the RCNLD.

Economic depreciation, a third form of depreciation, can be measured as the loss in value due to market conditions. Of the three approaches to value; Cost, Sales Comparison and Income Approach, market conditions are often captured in the income approach to value, since it adjusts for the projected market price of the product produced by the assets. The last two columns of Petitioner's Exhibit JPK-3 show the effect of substituting Mr. Reed's DCF values for Production Plant for my RCNLD values, with the difference shown in the column labeled Economic Depreciation. If the values for NIPSCO's generation assets determined by John J. Reed using the Discounted Cash Flow ("DCF") approach are substituted for my RCNLD values, the total value of NIPSCO's electric utility assets is $6.33 billion.

Q64. Does this conclude your prepared direct testimony?

A63. Yes, it does.

VERIFICATION

I, John P. Kelly, Executive Advisor for Concentric Energy Advisors, affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.

John P. Kelly

Date: August 18, 2008

INDS01 DWM 1057898

John P. Kelly
Executive Advisor

Mr. Kelly is a Valuation Consultant with over 40 years of wide experience in valuations and studies of public utility and industrial properties for rate-making, purchase and sale considerations, eminent domain/condemnation, ad valorem tax assessments, insurance, accounting, and financial purposes.

Mr. Kelly has been responsible for the development of value for electric, gas, telephone, water and steam utilities, and for many types of industrial properties. He has testified before utility commissions, federal and state courts, and before administrative bodies on more than 60 occasions. In addition to his valuation experience, he has also been appointed and approved to prepare independent engineer's certificates relative to valuation matters by numerous utility companies, trustees, and banks.

These assignments have been carried out throughout the United States, Puerto Rico, the U.S. Virgin Islands, and in the following foreign countries: Barbados, Brazil, Canada, India, New Zealand, Peru and Venezuela.

Prior to his valuation experience, Mr. Kelly was responsible for reviewing for approval, the proposed construction of outside plant by New England Telephone Company. As an undergraduate, he was employed by New England Power Service Company and Doble Engineering Company.

PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2003 – Present)
Executive Advisor

Navigant Consulting, Inc. (2000 – 2003)
Director

Stone & Webster Management Consultants, Inc. (1964 – 2000)
Senior Vice President
Vice President
Senior Appraisal Engineer
Appraisal Engineer

New England Telephone Company (1963 – 1964)
Supervisory Assistant – Outside Plant

Doble Engineering Company (1959 – 1963)
Intern – Research & Development

New England Power Service Company (1958 – 1959)
Intern – Transmission Engineering

PROFESSIONAL LICENSE

Registered Professional Engineer – State of Maine, License No. 5148
Certified General Real Estate Appraiser:

- Commonwealth of Massachusetts, License No. 209
- State of Maine, Certificate No. CG 1342
- State of Michigan, Permanent I.D. No. 1201071037
- State of New York, I.D. No. 4600003621

ASSOCIATION MEMBERSHIPS

American Society of Appraisers, Accredited Member
Eta Kappu Nu – Electrical Engineering Honor Society
American Water Works Association

EDUCATION

Northeastern University, BS, Electrical Engineering, 1963
Northeastern University, Graduate School of Engineering, 1968
University of Southern Maine – Uniform Standards of Professional Appraisal Practice
Appraisal Institute – Real Estate Appraisal Principles
Appraisal Institute – Basic Valuation Procedures
Appraisal Institute – Capitalization Theory and Techniques, Part A
Appraisal Institute – Capitalization Theory and Techniques, Part B
Appraisal Institute – Case Studies in Real Estate Valuation
Appraisal Institute – Standards of Professional Practice Parts A and B
Appraisal Institute – Highest & Best Use and Market Analysis
American Society of Appraisers – National Uniform Standards of Professional Appraisal Practice
Appraisal Institute – General Applications
Appraisal Institute – Standards of Professional Practice, Part C

YEAR	CASE	PURPOSE	HEARD BY
1975	Indianapolis Power & Light Co.	Valuation and Rate Base	P.U.C. (IN)
1976	Indianapolis Power & Light Co.	Valuation and Rate Base	P.U.C. (IN)
1978	Indianapolis Power & Light Co.	Valuation and Rate Base	P.U.C. (IN)
1978	Montaup Electric Co.	Ad Valorem Taxes City of Fall River	Appellate Tax Board (MA)
1979	Niagara Mohawk Power Corp.	Condemnation Town of Massena	St. Lawrence County Supreme Court (NY)
1980	Niagara Mohawk Power Corp.	Condemnation Town of Massena	St. Lawrence County Supreme Court (NY)
1981	Boston Edison Co.	Ad Valorem Taxes City of Somerville	Appellate Tax Board (MA)
1981	Indianapolis Power & Light Co.	Valuation and Rate Base	P.U.C. (IN)
1982	Southern Indiana Gas & Electric Co.	Valuation and Rate Base	P.U.C. (IN)
1982	Indianapolis Power & Electric Co.	Valuation and Rate Base	P.U.C. (IN)
1982	Southern Indiana Gas & Electric Co.	Valuation and Rate Base	P.U.C. (IN)
1983	Massachusetts Electric Company	Ad Valorem TaxesCity of Quincy	Appellate Tax Board (MA)
1983	New England Power Company	Ad Valorem Taxes City of Quincy	Appellate Tax Board (MA)
1983	Boston Edison Company	Ad Valorem Taxes City of Watertown	Appellate Tax Board (MA)
1984	Automatic Comfort Corporation	Stockholders' Suit	Board of Arbitration (Hartford, CT)
1984	Seabrook Station	Ad Valorem Taxes Town of Seabrook	Superior Court (NH)
1984	Boston Edison Company	Ad Valorem Taxes City of Boston	Appellate Tax Board (MA)
1985	Granite State Gas Transmission Company	Ad Valorem Taxes Town of East Kingston	Board of Land and Tax Appeals (NH)
1985	Hunt Energy Company	Bankruptcy	U.S. Bankruptcy Court for Northern Ohio
1985	Indianapolis Power & Light Co.	Valuation and Rate Base	P.U.C. (IN)

YEAR	CASE	PURPOSE	HEARD BY
1986	New England Power Company	Ad Valorem Taxes Town of Hartford	Windsor County Superior Court (VT)
1986	Seabrook Station	Ad Valorem Taxes Town of Seabrook	Superior Court (NH)
1986	Ohio Edison Co.	Condemnation	Public Hearing (Marion, OH)
1986	Northern Indiana Public Service Co.	Valuation and Rate Base	P.U.C. (IN)
1986	Clarkston General Water Supply, Inc.	Condemnation	Asotin County Superior Court (WA)
1987	Dow Chemical Co.	Ad Valorem Taxes	Louisiana Tax Commission
1987	Orange & Rockland Utilities Company	Ad Valorem Taxes Town of Ramapo	Rockland County Supreme Court (NY)
1987	Public Service Company of New Hampshire	Ad Valorem Taxes Town of Londonderry	Board of Land and Tax Appeals (NH)
1987	Northern Indiana Public Service Company	Valuation and Rate Base	Indiana Utility Regulatory Commission
1987	Cooper Industries Crouse-Hinds Division	Ad Valorem Taxes Town of Salina	Onondaga County Supreme Court (NY)
1988	Seabrook Station	Ad Valorem Taxes Town of Seabrook	Rockingham County Superior Court (NH)
1989	Pacific Power & Light Company	Condemnation Alturas, California	U.S. District Court Eastern District of California
1989	Iowa Public Service Company	Condemnation Sheldon, Iowa	Iowa Public Utilities Board
1990	San Diego Gas & Electric Company	Condemnation San Juan Capistrano, California	Orange County Superior Court (CA)
1991	Peoples Natural Gas	Condemnation, Hartley, Iowa	O'Brien County District Court
1991	Peoples Natural Gas	Condemnation, Everly, Iowa	Clay County District Court
1991	Boston Edison Company	Ad Valorem Taxes City of Everett	Appellate Tax Board (MA)

EXPERT TESTIMONY OF JOHN P. KELLY

YEAR	CASE	PURPOSE	HEARD BY
1992	Indianapolis Power & Light Company	Valuation and Rate Base	Indiana Utility Regulatory Commission
1993	Southern New Hampshire Water Company	Ad Valorem Taxes Town of Hudson	Hillsborough County Superior Court (NH)
1993	San Diego Gas & Electric Co.	Condemnation Oceanside, California	San Diego County Superior Court (CA)
1995	Ebensburg Power Company	Contract Dispute	Board of Arbitration (Pittsburgh, PA)
1996	Connecticut Yankee Atomic Power Company	Ad Valorem Taxes Town of Haddam	Middlesex County Superior Court (CT)
1998	Turners Falls Cogeneration Plant	Ad Valorem Taxes Town of Montague	Appellate Tax Board (MA)
1998	Public Service Company of Colorado	Asset Transfer	Public Utility Commission of Colorado
1998	Ohio Edison Company Perry Nuclear Plant	Ad Valorem Taxes	Board of Tax Appeals (OH)
1999	Pennsylvania Power Company	Ad Valorem Taxes	Lawrence County Board of Assessment Appeals (PA)
1999	Beaver Valley Nuclear Power Station & Bruce Mansfield Power Plant	Ad Valorem Taxes	Beaver County Board Of Assessment Appeals (PA)
2001	Northern Indiana Public Service Company	Valuation and Rate Base	Indiana Utility Regulatory Commission
2004	Indiana Gas Company, Inc.	Valuation and Rate Base	Indiana Utility Regulatory Commission
2004	Southern Indiana Gas and Electric Co., Inc.	Valuation and Rate Base	Indiana Utility Regulatory Commission
2004	Frank R. Phillips Power Plant	Ad Valorem Taxes	Court of Common Pleas (Allegheny County, PA)
2006	Detroit Edison Company Belle River Generating Plant	Ad Valorem Taxes	Michigan Tax Tribunal
2006	Detroit Edison Company St. Clair Generating Plant	Ad Valorem Taxes	Michigan Tax Tribunal
2006	Southern Indiana Gas and Electric Co., Inc. (Electric)	Valuation and Rate Base	Indiana Utility Regulatory Commission
2006	Southern Indiana Gas and Electric Co., Inc. (Gas)	Valuation and Rate Base	Indiana Utility Regulatory Commission

YEAR	CASE	PURPOSE	HEARD BY
2007	Southern Indiana Gas and Electric Co., Inc. (Gas)	Valuation and Rate Base	Indiana Utility Regulatory Commission
2007	Indiana Gas Company	Valuation and Rate Base	Indiana Utility Regulatory Commission
2007	Interstate Power & Light Company	Municipalization Everly, Iowa	Iowa Utilities Board
2007	Interstate Power & Light Company	Municipalization Terril, Iowa	Iowa Utilities Board
2007	Interstate Power & Light Company	Municipalization Kalona, Iowa	Iowa Utilities Board
2007	Interstate Power & Light Company	Municipalization Rolfe, Iowa	Iowa Utilities Board
2007	Interstate Power & Light Company	Municipalization Wellman, Iowa	Iowa Utilities Board
2007	Consolidated Edison Company ROCA 3 Generating Plant	Valuation	United States Court of Federal Claims

Summary
Replacement Cost New Less Depreciation

Account Description	Original Cost	Reproduction Cost New	RCNLD	Economic Depreciation[1]	Value Adjusted for Economic Depreciation
Intangible Plant	$ 26,431,540	$ 26,431,540	$ 26,431,540		$ 26,431,540
Production Plant	$ 2,687,080,374	$ 6,505,478,939	$ 2,805,467,396	$ 535,046,734	$ 2,270,420,663
Transmission Plant	$ 680,177,450	$ 2,133,974,442	$ 1,444,788,084		$ 1,444,788,084
Distribution Plant	$ 1,332,307,525	$ 3,477,578,384	$ 2,166,577,167		$ 2,166,577,167
General Plant	$ 151,600,975	$ 228,157,949	$ 94,897,824		$ 94,897,824
Common Plant	$ 214,502,539	$ 428,446,655	$ 326,635,365		$ 326,635,365
Total Electric Plant in Service	$ 5,092,100,403	$ 12,800,067,910	$ 6,864,797,377	$ 535,046,734	$ 6,329,750,643

Note:
[1] Economic Depreciation is calculated as the difference between the RCNLD and the DCF analysis as presented in the testimony of Mr. Reed.

Replacement Cost New Less Depreciation
Electric Plant

Account #	Account Description	Original Cost	Reproduction Cost New	Percent Condition	RCNLD
	Intangible Plant				
302	Franchises & Consents	$ 1,389	$ 1,389	100%	$ 1,389
303	Miscellaneous Intangible Plant	$ 26,430,151	$ 26,430,151	100%	$ 26,430,151
	Total Intangible Plant	**$ 26,431,540**	**$ 26,431,540**		**$ 26,431,540**
	Production Plant[1]				
	Steam Production Plant				
	Bailly Station				
310	Land and Land Rights	$ 142,358	$ 2,156,934	100%	$ 2,156,934
311	Structures and Improvements	$ 51,876,528	$ 213,565,680)		
312	Boiler Plant Equipment	$ 283,136,371	$ 596,297,100)		
314	Turbogenerator Units	$ 65,325,143	$ 210,508,121)		$ 418,423,458
315	Accessory Elect Equipment	$ 37,142,363	$ 138,055,421)		
316	Misc Pwr Plant Equipment	$ 5,403,785	$ 11,147,224)		
	Total Bailly Station	$ 443,026,548	$ 1,171,730,480	36%	$ 420,580,392
	Michigan City Station				
310	Land and Land Rights	$ 389,431	$ 23,971,268	100%	$ 23,971,268
311	Structures and Improvements	$ 59,159,672	$ 317,831,082)		
312	Boiler Plant Equipment	$ 208,556,451	$ 421,344,161)		
314	Turbogenerator Units	$ 43,421,898	$ 158,292,292)		$ 345,429,525
315	Accessory Elect Equipment	$ 36,995,303	$ 158,943,247)		
316	Misc Pwr Plant Equipment	$ 5,487,152	$ 13,101,244)		
	Total Michigan City Station	$ 354,009,906	$ 1,093,483,295	34%	$ 369,400,793
	Schahfer Station				
310	Land and Land Rights	$ 3,340,339	$ 14,732,324	100%	$ 14,732,324
311	Structures and Improvements	$ 351,547,585	$ 858,061,012)		
312	Boiler Plant Equipment	$ 992,541,649	$ 1,931,034,966)		
314	Turbogenerator Units	$ 278,934,006	$ 601,346,080)		$ 1,918,377,777
315	Accessory Elect Equipment	$ 180,959,845	$ 591,642,699)		
316	Misc Pwr Plant Equipment	$ 25,687,653	$ 56,381,808)		
	Total Schahfer Station	$ 1,833,011,078	$ 4,053,198,889	48%	$ 1,933,110,100
	Total Steam Production Plant	**$ 2,630,047,532**	**$ 6,318,412,664**	**43%**	**$ 2,723,091,286**

Replacement Cost New Less Depreciation
Electric Plant

Account #	Account Description	Original Cost	Reproduction Cost New	Percent Condition	RCNLD
	Hydroelectric Generating Plant				
	Norway Station				
310	Land and Land Rights	$ -	$ -		
311	Structures and Improvements	$ -	$ -		
312	Boiler Plant Equipment	$ -	$ -		
314	Turbogenerator Units	$ -	$ -		
315	Accessory Elect Equipment	$ 1,658	$ 3,090		
316	Misc Pwr Plant Equipment	$ -	$ -		
330	Land and Land Rights	$ 15,641	$ 687,523		$ 4,562,016
331	Structures & Improvements	$ 1,077,508	$ 3,462,850		
332	Reserviors Dams and Waterways	$ 2,058,519	$ 12,321,414		
333	Water wheels and Turbine Generators	$ 1,541,425	$ 3,299,070		
334	Accessory Elect Equipment	$ 1,621,496	$ 2,815,838		
335	Misc Pwr Plant Equipment	$ 34,197	$ 69,657		
	Total Norway Station	$ 6,350,445	$ 22,659,443	20%	$ 4,562,016
	Oakdale Station				
310	Land and Land Rights	$ -	$ -		
311	Structures and Improvements	$ -	$ -		
312	Boiler Plant Equipment	$ -	$ -		
314	Turbogenerator Units	$ -	$ -		
315	Accessory Elect Equipment	$ 6,931	$ 12,181		
316	Misc Pwr Plant Equipment	$ -	$ -		
330	Land and Land Rights	$ 7,496	$ 237,971		$ 11,534,001
331	Structures & Improvements	$ 1,879,941	$ 4,448,487		
332	Reserviors Dams and Waterways	$ 3,911,909	$ 26,468,506		
333	Water wheels and Turbine Generators	$ 2,992,041	$ 9,884,509		
334	Accessory Elect Equipment	$ 386,966	$ 1,268,829		
335	Misc Pwr Plant Equipment	$ 58,205	$ 154,322		
	Total Oakdale Station	$ 9,243,489	$ 42,474,805	27%	$ 11,534,001
	Total Hydroelectric Production Plant	**$ 15,593,933**	**$ 65,134,248**	**25%**	**$ 16,096,016**
	Other Production Plant				
	Bailly Station				
341	Structures & Improvements	$ 209,096	$ 1,152,954		
342	Fuel Holders	$ 456,786	$ 2,108,240		
343	Prime Movers	$ 2,971,246	$ 11,218,893		$ 7,802,575
344	Generators	$ 542,631	$ 2,948,723		
345	Accessory Electric Equipment	$ 699,352	$ 3,517,763		
346	Misc. Plant Equipment	$ 230,444	$ 961,271		
	Total Bailly Station	$ 5,109,554	$ 21,907,843	36%	$ 7,802,575
	Schahfer Station				
340	Land & Rights	$ 8,782	$ 22,058	100%	$ 22,058
341	Structures & Improvements	$ 1,609,988	$ 4,585,375		
342	Fuel Holders	$ 8,411,458	$ 21,051,905		
343	Prime Movers	$ 19,736,424	$ 56,384,947		$ 58,455,461
344	Generators	$ 4,836,779	$ 14,163,767		
345	Accessory Electric Equipment	$ 1,642,139	$ 3,565,325		
346	Misc. Plant Equipment	$ 83,785	$ 250,807		
	Total Schahfer Station	$ 36,329,355	$ 100,024,184	58%	$ 58,477,519
	Total, Other Production Plant	**$ 41,438,908**	**$ 121,932,027**	**54%**	**$ 66,280,094**
	Total Production Plant	**$ 2,687,080,374**	**$ 6,505,478,939**	**43%**	**$ 2,805,467,396**

[1] Total Production Plant excludes the D.H. Mitchell facility and Michigan City Units 2 and 3 because NIPSCO proposes to retire these assets.

Replacement Cost New Less Depreciation
Electric Plant

Account #	Account Description	Original Cost	Reproduction Cost New	Percent Condition	RCNLD
	Transmission Plant				
350	Land and Land Rights	$ 27,828,639	$ 245,735,513	100%	$ 245,735,513
352	Structures and Improvements	$ 14,433,870	$ 38,334,840	68%	$ 26,067,691
353	Station Equipment	$ 342,560,662	$ 874,540,211	58%	$ 507,233,322
354	Towers & Fixtures	$ 88,317,313	$ 340,661,293	67%	$ 228,243,066
355	Poles & Fixtures	$ 92,986,755	$ 206,674,745	69%	$ 142,605,574
356	Overhead Conductors	$ 112,807,617	$ 424,317,049	69%	$ 292,778,764
357	Underground Conduit	$ 383,171	$ 1,423,469	42%	$ 597,857
358	Underground Conductors & Devices	$ 789,396	$ 1,666,359	67%	$ 1,116,461
359	Roads & Trails	$ 70,027	$ 620,965	66%	$ 409,837
	Total, Transmission Plant	$ 680,177,450	$ 2,133,974,442	68%	$ 1,444,788,084
	Distribution Plant				
360	Land and Land Rights	$ 3,015,283	$ 41,053,754	100%	$ 41,053,754
361	Structures and Improvements	$ 11,707,553	$ 55,411,586	51%	$ 28,259,909
362	Station Equipment	$ 205,064,007	$ 692,731,605	53%	$ 367,147,751
364	Poles, Towers & Fixtures	$ 254,410,392	$ 714,486,341	55%	$ 393,350,406
365	Overhead Conductors	$ 169,246,767	$ 613,347,038	62%	$ 380,275,164
366	Underground Conduit	$ 3,646,036	$ 13,392,377	55%	$ 7,365,808
367	Underground Conductors & Devices	$ 205,520,093	$ 366,292,540	86%	$ 315,011,585
368	Line Transformers	$ 195,631,384	$ 455,758,038	64%	$ 291,685,143
369	Services	$ 173,387,105	$ 323,172,195	75%	$ 243,922,775
370	Meters	$ 69,017,186	$ 123,894,265	53%	$ 65,363,132
371	Installations on Customer's Premises	$ 7,297,508	$ 10,445,522	26%	$ 2,715,836
373	Street Lighting & Signaling Systems	$ 34,364,231	$ 67,613,124	45%	$ 30,425,906
	Total, Distribution Plant	$ 1,332,307,525	$ 3,477,578,384	62%	$ 2,166,577,167
	General Plant				
389	Land and Land Rights	$ 200,133	$ 550,430	100%	$ 550,430
390	Structures and Improvements	$ 14,671,554	$ 36,891,649	60%	$ 22,134,989
391	Office Furniture & Equipment	$ 40,110,153	$ 52,880,944	33%	$ 17,281,315
392	Transportation Equipment	$ 8,438,165	$ 10,690,693	60%	$ 6,401,614
393	Stores Equipment	$ 1,999,776	$ 4,946,285	27%	$ 1,322,538
394	Tools, Shop & Garage Equipment	$ 19,878,594	$ 28,851,754	10%	$ 2,885,175
395	Laboratory Equipment	$ 17,298,805	$ 30,387,613	53%	$ 15,953,497
396	Power Operated Equipment	$ 28,858,146	$ 43,323,942	39%	$ 16,896,337
397	Communication Equipment	$ 19,198,321	$ 18,513,672	57%	$ 10,491,081
398	Miscellaneous Equipment	$ 949,329	$ 1,120,968	88%	$ 980,847
	Total, General Plant	$ 151,600,975	$ 228,157,949	42%	$ 94,897,824
	Common Plant				
301	Organization, Common	$ 90,403	$ 90,403	100%	$ 90,403
303	Miscellaneous Intangible Plant	$ 63,185,925	$ 63,185,925	100%	$ 63,185,925
389	Land	$ 6,326,347	$ 112,224,416	100%	$ 112,224,416
390	Structures & Improvements	$ 54,248,254	$ 149,689,620	58%	$ 86,819,980
391	Office Furniture & Equipment	$ 31,923,551	$ 36,351,467	58%	$ 21,011,487
392	Trns Eq - Autos, Common	$ 5,401,009	$ 7,558,903	55%	$ 4,190,406
393	Stores Equipment	$ 2,939,275	$ 5,843,737	77%	$ 4,480,198
394	Tools, Shop & Garage Equipment	$ 7,924,658	$ 11,100,939	76%	$ 8,436,713
395	Laboratory Equipment	$ 1,986,373	$ 2,770,256	83%	$ 2,285,461
396	Power Operated Equipment	$ 3,219,030	$ 5,934,776	21%	$ 1,246,303
397	Communication Equipment	$ 35,412,532	$ 31,297,026	67%	$ 20,884,884
398	Miscellaneous Equipment	$ 1,845,182	$ 2,399,188	75%	$ 1,799,391
	Total, Common Plant	$ 214,502,539	$ 428,446,655	76%	$ 326,635,365
	Total, Electric Plant In Service	$ 5,092,100,403	$ 12,800,067,910	30%	$ 6,864,797,377

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year		(e) Original Cost	(f) Adjustment Factor		(g) Reproduction Cost
1	Bailly	Land and Land Rights	31010	1960	$	142,348	15.15	$	2,156,782
2			31010	1962	$	10	15.15	$	152
3			31010	Total	$	142,358		$	2,156,934
4									
5		Structures and Improvements	31100	1953	$	114	12.12	$	1,380
6			31100	1962	$	7,714,950	8.98	$	69,257,104
7			31100	1964	$	123,756	8.66	$	1,071,284
8			31100	1965	$	4,093	8.36	$	34,208
9			31100	1966	$	31,468	8.08	$	254,243
10			31100	1967	$	25,782	7.82	$	201,578
11			31100	1968	$	8,221,536	7.34	$	60,385,685
12			31100	1969	$	35,393	6.83	$	241,646
13			31100	1970	$	10,936	6.30	$	68,846
14			31100	1971	$	1,219	5.64	$	6,870
15			31100	1972	$	763,295	5.27	$	4,021,883
16			31100	1973	$	2,624	4.85	$	12,720
17			31100	1974	$	4,600	4.14	$	19,057
18			31100	1975	$	427	3.76	$	1,603
19			31100	1976	$	90,629	3.64	$	330,325
20			31100	1977	$	2,589,035	3.44	$	8,901,103
21			31100	1978	$	2,888	3.13	$	9,031
22			31100	1979	$	74,836	2.87	$	214,658
23			31100	1980	$	4,963,067	2.63	$	13,075,469
24			31100	1981	$	4,358,135	2.46	$	10,724,065
25			31100	1982	$	6,653,811	2.38	$	15,811,214
26			31100	1983	$	832,542	2.29	$	1,903,685
27			31100	1984	$	112,340	2.19	$	246,415
28			31100	1985	$	322,539	2.13	$	685,761
29			31100	1986	$	5,508,924	2.07	$	11,412,372
30			31100	1987	$	971,884	2.02	$	1,963,035
31			31100	1988	$	58,365	1.94	$	112,947
32			31100	1989	$	72,626	1.86	$	134,888
33			31100	1991	$	354,445	1.84	$	651,451
34			31100	1992	$	2,075,996	1.80	$	3,730,697
35			31100	1993	$	547,034	1.72	$	942,859
36			31100	1994	$	744,718	1.64	$	1,224,793
37			31100	1995	$	295,765	1.59	$	471,627
38			31100	1996	$	405,389	1.56	$	631,374
39			31100	1997	$	210,864	1.52	$	321,440
40			31100	1998	$	46,632	1.50	$	69,715
41			31100	1999	$	31,509	1.45	$	45,799
42			31100	2000	$	870,781	1.38	$	1,203,473
43			31100	2001	$	291,198	1.32	$	384,110
44			31100	2002	$	493,625	1.27	$	627,231
45			31100	2003	$	204,077	1.24	$	253,825
46			31100	2004	$	583,999	1.17	$	682,576
47			31100	2005	$	481,879	1.10	$	530,295
48			31100	2006	$	85,188	1.05	$	89,724
49			31100	2007	$	601,617	1.00	$	601,617
50			31100	Total	$	51,876,528		$	213,565,680
51									
52		Boiler Plant Equipment	31210	1954	$	2,864	11.84	$	33,902
53			31210	1956	$	3,043	10.08	$	30,683
54			31210	1962	$	7,684,910	8.38	$	64,373,487
55			31210	1964	$	114,688	8.25	$	946,143
56			31210	1966	$	121,730	7.89	$	960,572
57			31210	1967	$	9,047	7.67	$	69,376
58			31210	1968	$	16,172,194	7.36	$	118,992,291
59			31210	1969	$	5,008	7.07	$	35,411
60			31210	1970	$	87,878	6.64	$	583,509
61			31210	1971	$	111,799	6.12	$	683,957
62			31210	1972	$	114,703	5.73	$	657,406
63			31210	1973	$	431,465	5.44	$	2,349,238
64			31210	1974	$	2,016	4.54	$	9,147
65			31210	1975	$	68,875	3.86	$	265,965
66			31210	1976	$	57,902	3.61	$	208,785

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost	Adjustment Factor	Reproduction Cost
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
67			31210	1977	$ 861,206	3.38	$ 2,912,478
68			31210	1978	$ 368,490	3.09	$ 1,139,973
69			31210	1979	$ 191,919	2.82	$ 541,431
70			31210	1980	$ 15,924,779	2.58	$ 41,093,446
71			31210	1981	$ 31,761,982	2.37	$ 75,190,220
72			31210	1982	$ 3,306,522	2.25	$ 7,439,394
-1.6E+08			31210	1983	$ 2,949,802	2.20	$ 6,476,237
74			31210	1984	$ 687,486	2.11	$ 1,450,861
75			31210	1985	$ 8,337,456	2.05	$ 17,066,069
76			31210	1986	$ 9,299,262	2.02	$ 18,752,809
77			31210	1987	$ 1,230,535	1.94	$ 2,392,861
78			31210	1988	$ 876,202	1.83	$ 1,606,310
79			31210	1989	$ 1,291,905	1.76	$ 2,274,586
80			31210	1990	$ 10,793,050	1.68	$ 18,179,723
81			31210	1991	$ 7,138,009	1.65	$ 11,777,273
82			31210	1992	$ 7,650,044	1.61	$ 12,350,757
83			31210	1993	$ 2,834,849	1.57	$ 4,444,975
84			31210	1994	$ 703,640	1.52	$ 1,067,180
85			31210	1995	$ 1,575,345	1.48	$ 2,326,084
86			31210	1996	$ 2,352,349	1.44	$ 3,395,112
87			31210	1997	$ 1,551,694	1.41	$ 2,194,456
88			31210	1998	$ 5,690,416	1.39	$ 7,888,772
89			31210	1999	$ 1,357,549	1.36	$ 1,843,287
90			31210	2000	$ 4,955,002	1.30	$ 6,435,057
91			31210	2001	$ 904,035	1.25	$ 1,126,381
92			31210	2002	$ 2,981,969	1.21	$ 3,596,061
93			31210	2003	$ 14,868,240	1.19	$ 17,743,459
94			31210	2004	$ 71,466,638	1.14	$ 81,748,163
95			31210	2005	$ 8,848,224	1.09	$ 9,601,749
96			31210	2006	$ 4,931,580	1.04	$ 5,139,033
97			31210	2007	$ 21,669,209	1.00	$ 21,669,209
98			31210	Total	$ 274,347,513		$ 581,063,280
99							
100		Boiler Pl Eq, Mobile Fuel Hdl	31220	1955	$ 126,069	11.34	$ 1,430,040
101			31220	1974	$ 112,180	4.54	$ 508,998
102			31220	1987	$ 409,641	1.94	$ 796,576
103			31220	1992	$ 36,723	1.61	$ 59,288
104			31220	1993	$ 585,809	1.57	$ 918,534
105			31220	1995	$ 627,894	1.48	$ 927,120
106			31220	1998	$ 539,807	1.39	$ 748,348
107			31220	1999	$ 232,492	1.36	$ 315,679
108			31220	2000	$ 437,966	1.30	$ 568,786
109			31220	2001	$ 482,902	1.25	$ 601,672
110			31220	2002	$ 71,397	1.21	$ 86,101
111			31220	2003	$ 40,029	1.19	$ 47,770
112			31220	2004	$ 503,566	1.14	$ 576,011
113			31220	2006	$ 777,172	1.04	$ 809,864
114			31220	2007	$ 15,055	1.00	$ 15,055
115			31220	Total	$ 4,998,702		$ 8,409,841
116							
117		Boiler Pl Eq, Unit Train Coal	31230	1990	$ 17,293	1.68	$ 29,128
118			31230	1991	$ 2,823,046	1.65	$ 4,657,851
119			31230	1992	$ (0)	1.61	$ -
120			31230	Total	$ 2,840,339		$ 4,686,979
121							
122		Boiler Pl Eq, SO2 Plant	31240	1991	$ 19	1.65	$ 32
123			31240	Total	$ 19		$ 32
124							
125		Boiler Pl Eq, Coal Pile Base	31250	1982	$ 949,799	2.25	$ 2,136,968
126			31250	Total	$ 949,799		$ 2,136,968
127							
128		Turbogenerator Units	31400	1962	$ 7,407,327	7.40	$ 54,844,827
129			31400	1964	$ 4,592	7.30	$ 33,505
130			31400	1966	$ 2,969	7.09	$ 21,055
131			31400	1968	$ 12,223,574	6.90	$ 84,305,982
132			31400	1969	$ 251,435	6.71	$ 1,687,902
133			31400	1972	$ 1,476	5.14	$ 7,582
134			31400	1975	$ 28,531	3.93	$ 112,224
135			31400	1980	$ 165,524	2.53	$ 418,785
136			31400	1981	$ 103,431	2.29	$ 236,706
137			31400	1982	$ 189,669	2.15	$ 408,097

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
138			31400	1983	$	352,489	2.04	$	718,508
139			31400	1984	$	523,889	1.97	$	1,034,384
140			31400	1985	$	697,133	1.95	$	1,360,439
141			31400	1986	$	2,153,055	1.96	$	4,217,985
142			31400	1987	$	1,390,828	1.91	$	2,662,567
143			31400	1988	$	24,366	1.80	$	43,853
144			31400	1989	$	3,300	1.74	$	5,755
145			31400	1990	$	1,491,419	1.71	$	2,549,749
146			31400	1991	$	23,411,356	1.68	$	39,323,342
147			31400	1992	$	193,959	1.65	$	320,705
148			31400	1993	$	36,279	1.60	$	58,033
149			31400	1995	$	1,383	1.47	$	2,031
150			31400	1996	$	754,945	1.44	$	1,088,333
151			31400	1997	$	117,072	1.40	$	163,392
152			31400	1998	$	686,239	1.37	$	941,440
153			31400	1999	$	15,096	1.35	$	20,391
154			31400	2000	$	3,149	1.29	$	4,058
155			31400	2001	$	113,582	1.27	$	144,411
156			31400	2002	$	1,117,352	1.22	$	1,361,320
157			31400	2003	$	3,140,772	1.16	$	3,637,306
158			31400	2004	$	160,182	1.13	$	180,826
159			31400	2005	$	400,670	1.08	$	434,528
160			31400	2007	$	8,158,100	1.00	$	8,158,100
161			31400	Total	$	65,325,143		$	210,508,121
162									
163		Accessory Elect Equipment	31500	1949	$	5,535	14.91	$	82,536
164			31500	1950	$	6,070	14.00	$	84,974
165			31500	1953	$	5,759	11.24	$	64,755
166			31500	1954	$	39,378	11.06	$	435,650
167			31500	1957	$	22,651	9.66	$	218,824
168			31500	1958	$	2,093	9.40	$	19,666
169			31500	1960	$	4,186	10.09	$	42,226
170			31500	1962	$	2,562,385	11.24	$	28,813,135
171			31500	1964	$	9,412	11.06	$	104,133
172			31500	1965	$	407,298	10.39	$	4,232,965
173			31500	1966	$	34,477	10.24	$	352,962
174			31500	1967	$	102,454	9.53	$	976,054
175			31500	1968	$	3,113,572	9.03	$	28,100,964
176			31500	1969	$	29,627	8.36	$	247,831
177			31500	1970	$	682	7.79	$	5,316
178			31500	1971	$	7,889	7.38	$	58,186
179			31500	1972	$	18,453	7.07	$	130,488
180			31500	1973	$	2,845	6.86	$	19,514
181			31500	1975	$	7,604	5.08	$	38,636
182			31500	1976	$	14,055	4.80	$	67,417
183			31500	1977	$	144,828	4.34	$	628,741
184			31500	1978	$	8,286	4.13	$	34,236
185			31500	1979	$	186,215	3.83	$	713,571
186			31500	1980	$	6,195,736	3.54	$	21,906,204
187			31500	1981	$	4,530,280	3.18	$	14,386,237
188			31500	1982	$	178,523	2.82	$	503,923
189			31500	1983	$	533,845	2.73	$	1,458,872
190			31500	1984	$	15,128	2.78	$	42,011
191			31500	1985	$	438,550	2.75	$	1,208,080
192			31500	1986	$	23,911	2.70	$	64,572
193			31500	1987	$	1,864,573	2.68	$	4,995,920
194			31500	1988	$	60,463	2.38	$	144,130
195			31500	1989	$	218,233	2.27	$	495,666
196			31500	1990	$	4,495,590	2.20	$	9,875,525
197			31500	1991	$	327,336	2.16	$	706,617
198			31500	1992	$	2,079,423	2.08	$	4,328,759
199			31500	1993	$	241,953	2.01	$	486,691
200			31500	1994	$	179,956	1.96	$	352,172
201			31500	1995	$	408,348	1.86	$	761,130
202			31500	1996	$	290,001	1.81	$	524,852
203			31500	1997	$	225,314	1.77	$	398,576
204			31500	1999	$	1,472,441	1.68	$	2,478,485
205			31500	2000	$	868,997	1.59	$	1,378,188
206			31500	2001	$	117,541	1.49	$	174,890
207			31500	2002	$	230,671	1.40	$	322,411
208			31500	2003	$	302,278	1.35	$	409,358

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
	(a)	(b)	(c)	(d)		(e)	(f)		(g)
209			31500	2004	$	109,113	1.29	$	141,280
210			31500	2005	$	81,978	1.19	$	97,707
211			31500	2006	$	234,149	1.10	$	258,110
212			31500	2007	$	4,682,276	1.00	$	4,682,276
213			31500	Total	$	37,142,363		$	138,055,421
214									
215		Misc Pwr Plant Equipment	31600	1962	$	96,423	9.10	$	877,135
216			31600	1964	$	2,463	8.80	$	21,684
217			31600	1968	$	171,009	7.58	$	1,296,344
218			31600	1972	$	15,812	5.81	$	91,811
219			31600	1976	$	81,796	4.04	$	330,700
220			31600	1977	$	2,875	3.69	$	10,603
221			31600	1979	$	63,943	3.10	$	198,296
222			31600	1981	$	1,101,706	2.54	$	2,796,803
223			31600	1983	$	4,980	2.22	$	11,050
224			31600	1984	$	264,360	2.14	$	565,836
225			31600	1985	$	128,804	2.04	$	263,302
226			31600	1986	$	34,296	2.01	$	68,819
227			31600	1987	$	22,657	1.95	$	44,165
228			31600	1990	$	4,400	1.74	$	7,660
229			31600	1992	$	367,572	1.67	$	614,931
230			31600	1993	$	1,043,029	1.61	$	1,683,036
231			31600	1994	$	166,521	1.53	$	255,122
232			31600	1999	$	63,310	1.35	$	85,584
233			31600	2000	$	162,294	1.29	$	210,031
234			31600	2001	$	82,548	1.25	$	103,218
235			31600	2002	$	256,377	1.21	$	310,612
236			31600	2003	$	6,191	1.19	$	7,394
237			31600	2004	$	134,024	1.13	$	151,294
238			31600	2005	$	252,726	1.06	$	266,805
239			31600	2006	$	78,233	1.02	$	79,552
240			31600	2007	$	795,436	1.00	$	795,436
241			31600	Total	$	5,403,785		$	11,147,224
242									
243		Structures and Improvments	34100	1968	$	173,529	6.19	$	1,074,733
244			34100	1986	$	35,566	2.20	$	78,220
245			34100	Total	$	209,096		$	1,152,954
246									
247		Fuel Holders	34200	1968	$	14,988	7.25	$	108,593
248			34200	1971	$	313,557	5.62	$	1,761,297
249			34200	1977	$	20,970	3.33	$	69,890
250			34200	1982	$	7,481	2.17	$	16,260
251			34200	1990	$	70,709	1.71	$	120,646
252			34200	2005	$	29,081	1.09	$	31,553
253			34200	Total	$	456,786		$	2,108,240
254									
255		Prime Movers	34300	1968	$	1,302,409	6.19	$	8,066,312
256			34300	1973	$	8,342	5.39	$	44,947
257			34300	1979	$	436,595	2.99	$	1,306,931
258			34300	1982	$	253,582	2.35	$	596,663
259			34300	1985	$	110,121	2.24	$	246,207
260			34300	2003	$	414,000	1.24	$	511,635
261			34300	2007	$	446,198	1.00	$	446,198
262			34300	Total	$	2,971,246		$	11,218,893
263									
264		Generators	34400	1968	$	467,875	6.01	$	2,811,249
265			34400	1983	$	34,234	2.27	$	77,573
266			34400	1992	$	40,521	1.48	$	59,901
267			34400	Total	$	542,631		$	2,948,723
268									
269		Accessory Electric Eq	34500	1953	$	2,883	10.79	$	31,109
270			34500	1967	$	107,627	6.49	$	698,696
271			34500	1968	$	401,925	6.19	$	2,489,275
272			34500	1984	$	20,058	2.26	$	45,411
273			34500	1987	$	4,416	2.04	$	9,014
274			34500	1992	$	101,360	1.52	$	154,280
275			34500	1995	$	48,201	1.52	$	73,109
276			34500	1999	$	7,297	1.35	$	9,848
277			34500	2000	$	5,584	1.26	$	7,021
278			34500	Total	$	699,352		$	3,517,763
279									

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost	Adjustment Factor	Reproduction Cost
280		Misc Power Plant Eq	34600	1968	$ 101,164	6.19	$ 626,546
281			34600	1976	$ 7,082	3.69	$ 26,136
282			34600	1981	$ 120,646	2.54	$ 306,637
283			34600	2000	$ 1,552	1.26	$ 1,951
284			34600	Total	$ 230,444		$ 961,271
285							
286	Bailly Total				$ 448,136,102		$ 1,193,638,322
287							
288	DH Mitchell	Land and Land Rights	31010	1956	$ 934,480	19.05	$ 17,799,616
289			31010	1960	$ 3,626	15.15	$ 54,941
290			31010	1962	$ 2,000	15.15	$ 30,303
291			31010	1968	$ 198,471	9.64	$ 1,912,969
292			31010	1977	$ 80,674	3.37	$ 271,631
293			31010	Total	$ 1,219,251		$ 20,069,459
294							
295		Structures and Improvements	31100	1956	$ 5,572,991	10.31	$ 57,479,825
296			31100	1959	$ 5,405,555	9.15	$ 49,441,241
297			31100	1960	$ 361,252	8.98	$ 3,242,958
298			31100	1961	$ 2,106	8.98	$ 18,905
299			31100	1962	$ 41,148	8.98	$ 369,384
300			31100	1963	$ 10,256	8.81	$ 90,392
301			31100	1964	$ 24,991	8.66	$ 216,328
302			31100	1966	$ 2,303,732	8.08	$ 18,612,541
303			31100	1967	$ 389	7.82	$ 3,040
304			31100	1968	$ 826	7.34	$ 6,070
305			31100	1969	$ 385,246	6.83	$ 2,630,294
306			31100	1970	$ 4,232,067	6.30	$ 26,643,225
307			31100	1971	$ 2,458	5.64	$ 13,856
308			31100	1972	$ 1,661	5.27	$ 8,754
309			31100	1973	$ 7,439	4.85	$ 36,062
310			31100	1974	$ 21,072	4.14	$ 87,308
311			31100	1975	$ 57,154	3.76	$ 214,775
312			31100	1976	$ 156,262	3.64	$ 569,542
313			31100	1977	$ 1,685,854	3.44	$ 5,795,965
314			31100	1978	$ 122,316	3.13	$ 382,540
315			31100	1979	$ 471,115	2.87	$ 1,351,342
316			31100	1980	$ 325,403	2.63	$ 857,293
317			31100	1981	$ 35,831	2.46	$ 88,168
318			31100	1982	$ 1,695,872	2.38	$ 4,029,840
319			31100	1983	$ 509,085	2.29	$ 1,164,070
320			31100	1984	$ 288,672	2.19	$ 633,196
321			31100	1985	$ 423,664	2.13	$ 900,766
322			31100	1986	$ 1,024,652	2.07	$ 2,122,684
323			31100	1987	$ 314,478	2.02	$ 635,191
324			31100	1988	$ 199,190	1.94	$ 385,464
325			31100	1989	$ 324,827	1.86	$ 603,304
326			31100	1990	$ 137,640	1.83	$ 252,496
327			31100	1991	$ 276,299	1.84	$ 507,823
328			31100	1992	$ 352,584	1.80	$ 633,615
329			31100	1993	$ 580,290	1.72	$ 1,000,179
330			31100	1994	$ 2,804	1.64	$ 4,612
331			31100	1995	$ 44,226	1.59	$ 70,522
332			31100	1996	$ 95,723	1.56	$ 149,085
333			31100	1997	$ 139,327	1.52	$ 212,389
334			31100	1998	$ 13,231	1.50	$ 19,781
335			31100	1999	$ 26,974	1.45	$ 39,208
336			31100	2000	$ 175,410	1.38	$ 242,427
337			31100	2001	$ 407,997	1.32	$ 538,177
338			31100	2007	$ 3,356	1.00	$ 3,356
339			31100	Total	$ 28,263,424		$ 182,307,990
340							
341		Boiler Plant Equipment	31210	1950	$ 455	14.33	$ 6,515
342			31210	1953	$ 22,000	12.37	$ 272,240
343			31210	1954	$ 1,358	11.84	$ 16,074
344			31210	1955	$ 17	11.34	$ 193
345			31210	1956	$ 5,857,995	10.08	$ 59,065,900
346			31210	1959	$ 7,800,274	8.51	$ 66,360,781
347			31210	1960	$ 6,601	8.38	$ 55,295
348			31210	1962	$ 113,548	8.38	$ 951,144
349			31210	1963	$ 3,360	8.38	$ 28,145
350			31210	1964	$ 68,285	8.25	$ 563,334

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost	Adjustment Factor	Reproduction Cost
351			31210	1966	$ 497,342	7.89	$ 3,924,530
352			31210	1967	$ 7,035	7.67	$ 53,949
353			31210	1968	$ 1,350	7.36	$ 9,935
354			31210	1969	$ 3,951,202	7.07	$ 27,939,598
355			31210	1970	$ 8,576,439	6.64	$ 56,947,510
356			31210	1971	$ 19,255	6.12	$ 117,800
357			31210	1972	$ 25,036	5.73	$ 143,489
358			31210	1973	$ 9,830	5.44	$ 53,522
359			31210	1974	$ 66,897	4.54	$ 303,535
360			31210	1975	$ 511	3.86	$ 1,973
361			31210	1976	$ 390,221	3.61	$ 1,407,068
362			31210	1977	$ 2,744,239	3.38	$ 9,280,634
363			31210	1978	$ 591,467	3.09	$ 1,829,783
364			31210	1979	$ 396,493	2.82	$ 1,118,562
365			31210	1980	$ 2,183,305	2.58	$ 5,633,958
366			31210	1981	$ 5,600,298	2.37	$ 13,257,599
367			31210	1982	$ 11,098,975	2.25	$ 24,971,758
368			31210	1983	$ 1,447,769	2.20	$ 3,178,551
369			31210	1984	$ 636,444	2.11	$ 1,343,142
370			31210	1985	$ 871,220	2.05	$ 1,783,315
371			31210	1986	$ 586,011	2.02	$ 1,181,745
372			31210	1987	$ 1,141,997	1.94	$ 2,220,693
373			31210	1988	$ 900,403	1.83	$ 1,650,677
374			31210	1989	$ 777,112	1.76	$ 1,368,218
375			31210	1990	$ 3,149,714	1.68	$ 5,305,352
376			31210	1991	$ 2,007,858	1.65	$ 3,312,841
377			31210	1992	$ 3,506,313	1.61	$ 5,660,833
378			31210	1993	$ 5,387,803	1.57	$ 8,447,945
379			31210	1994	$ 1,403,926	1.52	$ 2,129,274
380			31210	1995	$ 668,593	1.48	$ 987,214
381			31210	1996	$ 10,971,275	1.44	$ 15,834,686
382			31210	1997	$ 1,132,940	1.41	$ 1,602,241
383			31210	1998	$ 229,602	1.39	$ 318,304
384			31210	1999	$ 539,259	1.36	$ 732,208
385			31210	2000	$ 1,414,706	1.30	$ 1,837,278
386			31210	2001	$ 1,943,375	1.25	$ 2,421,345
387			31210	2002	$ 899,718	1.21	$ 1,085,002
388			31210	2003	$ 0	1.19	$ -
389			31210	2004	$ 28,135	1.14	$ 32,182
390			31210	Total	$ 89,677,962		$ 336,747,868
391							
392		Boiler Pl Eq, Mobile Fuel Hdl	31220	1962	$ 55,099	8.38	$ 461,539
393			31220	1987	$ 458,685	1.94	$ 891,945
394			31220	1990	$ 526,826	1.68	$ 887,381
395			31220	1996	$ 678,314	1.44	$ 979,001
396			31220	2000	$ 437,966	1.30	$ 568,786
397			31220	2002	$ 60,028	1.21	$ 72,389
398			31220	Total	$ 2,216,917		$ 3,861,041
399							
400		Boiler Pl Eq, Coal Pile Base	31250	1982	$ 2,840,862	2.25	$ 6,391,700
401			31250	Total	$ 2,840,862		$ 6,391,700
402							
403		Turbogenerator Units	31400	1956	$ 5,608,959	7.40	$ 41,529,475
404			31400	1959	$ 9,412,039	6.29	$ 59,234,779
405			31400	1960	$ 153,889	6.71	$ 1,033,072
406			31400	1962	$ 60,048	7.40	$ 444,601
407			31400	1964	$ 21,292	7.30	$ 155,363
408			31400	1965	$ 46,763	7.19	$ 336,348
409			31400	1966	$ 29,586	7.09	$ 209,803
410			31400	1968	$ 9,344	6.90	$ 64,449
411			31400	1969	$ 48,041	6.71	$ 322,500
412			31400	1970	$ 2,454,176	6.22	$ 15,254,701
413			31400	1971	$ 42,037	5.59	$ 235,167
414			31400	1972	$ 3,069	5.14	$ 15,765
415			31400	1973	$ 8,726	5.03	$ 43,936
416			31400	1974	$ 79,936	4.58	$ 365,877
417			31400	1976	$ 7,933	3.60	$ 28,528
418			31400	1977	$ 818	3.27	$ 2,673
419			31400	1979	$ 151,946	2.75	$ 418,044
420			31400	1980	$ 84,300	2.53	$ 213,283
421			31400	1981	$ 7,834	2.29	$ 17,928

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
422			31400	1982	$	85,532	2.15	$	184,032
423			31400	1983	$	155,256	2.04	$	316,472
424			31400	1984	$	134,015	1.97	$	264,605
425			31400	1985	$	711,496	1.95	$	1,388,467
426			31400	1986	$	10,812	1.96	$	21,181
427			31400	1987	$	69,990	1.91	$	133,987
428			31400	1988	$	753,062	1.80	$	1,355,326
429			31400	1989	$	371,485	1.74	$	647,742
430			31400	1990	$	1,641,009	1.71	$	2,805,490
431			31400	1991	$	246,779	1.68	$	414,506
432			31400	1992	$	181,902	1.65	$	300,770
433			31400	1993	$	3,410,752	1.60	$	5,455,914
434			31400	1994	$	15,254	1.52	$	23,238
435			31400	1995	$	1,985	1.47	$	2,916
436			31400	1996	$	928,582	1.44	$	1,338,649
437			31400	1997	$	189,924	1.40	$	265,068
438			31400	1998	$	323,053	1.37	$	443,191
439			31400	1999	$	228,875	1.35	$	309,146
440			31400	2000	$	1,108,597	1.29	$	1,428,426
441			31400	2001	$	86,694	1.27	$	110,224
442			31400	Total	$	28,885,790		$	137,135,641
443									
444		Accessory Elect Equipment	31500	1947	$	561	16.33	$	9,157
445			31500	1950	$	27,762	14.00	$	388,626
446			31500	1951	$	533	12.03	$	6,413
447			31500	1953	$	161,215	11.24	$	1,812,802
448			31500	1954	$	79,878	11.06	$	883,718
449			31500	1956	$	1,733,174	10.24	$	17,743,666
450			31500	1957	$	45	9.66	$	432
451			31500	1959	$	2,476,034	9.27	$	22,950,955
452			31500	1960	$	73,263	10.09	$	739,010
453			31500	1961	$	58	11.43	$	658
454			31500	1962	$	14,773	11.24	$	166,112
455			31500	1963	$	6,403	11.63	$	74,439
456			31500	1964	$	16,924	11.06	$	187,240
457			31500	1965	$	33,597	10.39	$	349,169
458			31500	1966	$	528,156	10.24	$	5,407,091
459			31500	1967	$	305,094	9.53	$	2,906,546
460			31500	1968	$	59,416	9.03	$	536,249
461			31500	1969	$	593,523	8.36	$	4,964,774
462			31500	1970	$	1,582,029	7.79	$	12,331,270
463			31500	1972	$	923,180	7.07	$	6,528,157
464			31500	1973	$	27,370	6.86	$	187,738
465			31500	1974	$	14,098	5.91	$	83,363
466			31500	1975	$	39,016	5.08	$	198,238
467			31500	1976	$	26,079	4.80	$	125,091
468			31500	1977	$	58,220	4.34	$	252,752
469			31500	1978	$	146,778	4.13	$	606,498
470			31500	1979	$	111,831	3.83	$	428,534
471			31500	1980	$	33,536	3.54	$	118,574
472			31500	1981	$	94,347	3.18	$	299,607
473			31500	1982	$	29,171	2.82	$	82,343
474			31500	1983	$	309,428	2.73	$	845,594
475			31500	1984	$	1,580,325	2.78	$	4,388,594
476			31500	1985	$	828,639	2.75	$	2,282,665
477			31500	1986	$	44,352	2.70	$	119,772
478			31500	1987	$	366,269	2.68	$	981,377
479			31500	1988	$	282,995	2.38	$	674,589
480			31500	1989	$	205,491	2.27	$	466,725
481			31500	1990	$	55,459	2.20	$	121,827
482			31500	1991	$	104,944	2.16	$	226,541
483			31500	1992	$	32,089	2.08	$	66,800
484			31500	1993	$	224,077	2.01	$	450,732
485			31500	1994	$	2,523,020	1.96	$	4,937,517
486			31500	1995	$	194,943	1.86	$	363,358
487			31500	1996	$	274,033	1.81	$	495,952
488			31500	1997	$	502,399	1.77	$	888,736
489			31500	1998	$	290,657	1.73	$	503,456
490			31500	1999	$	24,692	1.68	$	41,562
491			31500	2000	$	422,183	1.59	$	669,562
492			31500	2001	$	192,174	1.49	$	285,937

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
493			31500	2002	$	22,935	1.40	$	32,056
494			31500	2003	$	3,305	1.35	$	4,476
495			31500	Total	$	17,680,472		$	99,217,050
496									
497		Misc Pwr Plant Equipment	31600	1956	$	92,523	10.70	$	990,185
498			31600	1959	$	70,419	9.41	$	662,669
499			31600	1963	$	281	8.95	$	2,517
500			31600	1964	$	5,368	8.80	$	47,258
501			31600	1969	$	4,402	7.09	$	31,200
502			31600	1970	$	183,589	6.58	$	1,207,269
503			31600	1972	$	72,623	5.81	$	421,678
504			31600	1977	$	63,264	3.69	$	233,307
505			31600	1979	$	25,592	3.10	$	79,363
506			31600	1984	$	8,280	2.14	$	17,722
507			31600	1985	$	64,309	2.04	$	131,459
508			31600	1988	$	18,912	1.86	$	35,229
509			31600	1990	$	7,170	1.74	$	12,483
510			31600	1991	$	6,075	1.71	$	10,394
511			31600	1993	$	704,781	1.61	$	1,137,237
512			31600	1994	$	714,475	1.53	$	1,094,629
513			31600	1997	$	2,328	1.43	$	3,320
514			31600	1998	$	11,556	1.39	$	16,100
515			31600	1999	$	2,351	1.35	$	3,178
516			31600	2000	$	66,408	1.29	$	85,941
517			31600	Total	$	2,124,705		$	6,223,138
518									
519		Structures and Improvments	34100	1966	$	92,290	7.18	$	663,039
520			34100	1968	$	1,292	6.19	$	7,999
521			34100	Total	$	93,581		$	671,038
522									
523		Fuel Holders	34200	1966	$	4,873	7.81	$	38,064
524			34200	1971	$	299,042	5.62	$	1,679,766
525			34200	1975	$	2,171	3.88	$	8,413
526			34200	1981	$	8,615	2.33	$	20,033
527			34200	2000	$	47,120	1.36	$	63,881
528			34200	Total	$	361,821		$	1,810,157
529									
530		Prime Movers	34300	1966	$	721,960	7.18	$	5,186,793
531			34300	1977	$	4,853	3.35	$	16,242
532			34300	1986	$	14,704	2.20	$	32,338
533			34300	1992	$	808,607	1.52	$	1,230,781
534			34300	1993	$	45,226	1.50	$	67,927
535			34300	1999	$	5,178	1.35	$	6,989
536			34300	2007	$	4,300	1.00	$	4,300
537			34300	Total	$	1,604,828		$	6,545,369
538									
539		Generators	34400	1966	$	362,847	6.94	$	2,519,948
540			34400	Total	$	362,847		$	2,519,948
541									
542		Accessory Electric Eq	34500	1966	$	199,402	7.18	$	1,432,567
543			34500	1968	$	1,874	6.19	$	11,608
544			34500	1974	$	12,899	5.04	$	64,956
545			34500	1985	$	15,317	2.24	$	34,245
546			34500	1992	$	302,739	1.52	$	460,800
547			34500	2000	$	19,426	1.26	$	24,427
548			34500	Total	$	551,657		$	2,028,603
549									
550		Misc Power Plant Eq	34600	1966	$	22,982	7.18	$	165,107
551			34600	1972	$	1,916	5.44	$	10,427
552			34600	Total	$	24,898		$	175,535
553									
554	DH Mitchell Total				$	175,909,014		$	805,704,539
555									
556	Michigan City	Land and Land Rights	31010	1931	$	387,503	61.54	$	23,846,332
557			31010	1936	$	1,768	68.97	$	121,940
558			31010	1950	$	18	29.20	$	511
559			31010	1957	$	143	17.39	$	2,486
560			31010	Total	$	389,431		$	23,971,268
561									
562		Structures and Improvements	31100	1931	$	3,315,844	30.30	$	100,461,350
563			31100	1932	$	458	34.63	$	15,869

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
564			31100	1933	$	300	34.63	$	10,388
565			31100	1934	$	143	30.30	$	4,333
566			31100	1935	$	950	32.32	$	30,694
567			31100	1936	$	5,284	30.30	$	160,078
568			31100	1937	$	241	28.52	$	6,884
569			31100	1938	$	198,567	28.52	$	5,662,164
570			31100	1939	$	964	28.52	$	27,481
571			31100	1940	$	4,903	26.93	$	132,052
572			31100	1941	$	303	25.51	$	7,729
573			31100	1942	$	3,413	24.24	$	82,727
574			31100	1943	$	39	24.24	$	949
575			31100	1948	$	1,696	15.15	$	25,686
576			31100	1949	$	5,428	14.69	$	79,742
577			31100	1950	$	3,000,996	14.26	$	42,786,965
578			31100	1951	$	9	13.10	$	118
579			31100	1952	$	248,690	12.76	$	3,172,486
580			31100	1953	$	766,742	12.12	$	9,292,103
581			31100	1954	$	504,919	11.54	$	5,827,702
582			31100	1955	$	51,491	11.02	$	567,284
583			31100	1956	$	20,599	10.31	$	212,459
584			31100	1957	$	49,003	9.70	$	475,092
585			31100	1958	$	2,181	9.51	$	20,732
586			31100	1959	$	2,547	9.15	$	23,294
587			31100	1960	$	1,996	8.98	$	17,917
588			31100	1961	$	7,378	8.98	$	66,230
589			31100	1962	$	1,233	8.98	$	11,067
590			31100	1963	$	27,776	8.81	$	244,814
591			31100	1964	$	4,376	8.66	$	37,885
592			31100	1965	$	2,667	8.36	$	22,294
593			31100	1966	$	81,974	8.08	$	662,296
594			31100	1967	$	47,322	7.82	$	369,996
595			31100	1968	$	208,347	7.34	$	1,530,270
596			31100	1969	$	208,283	6.83	$	1,422,070
597			31100	1970	$	31,241	6.30	$	196,680
598			31100	1971	$	1,126	5.64	$	6,349
599			31100	1972	$	15,395	5.27	$	81,116
600			31100	1974	$	24,804,371	4.14	$	102,770,228
601			31100	1975	$	53,086	3.76	$	199,487
602			31100	1976	$	51,982	3.64	$	189,463
603			31100	1977	$	7,955	3.44	$	27,350
604			31100	1978	$	94,026	3.13	$	294,063
605			31100	1979	$	32,277	2.87	$	92,583
606			31100	1980	$	1,753,992	2.63	$	4,620,986
607			31100	1981	$	1,181,741	2.46	$	2,907,912
608			31100	1982	$	1,377,129	2.38	$	3,272,423
609			31100	1983	$	388,601	2.29	$	888,573
610			31100	1984	$	206,644	2.19	$	453,268
611			31100	1985	$	499,708	2.13	$	1,062,446
612			31100	1986	$	1,098,705	2.07	$	2,276,095
613			31100	1987	$	1,169,526	2.02	$	2,362,238
614			31100	1988	$	157,601	1.94	$	304,983
615			31100	1989	$	19,086	1.86	$	35,449
616			31100	1990	$	451,840	1.83	$	828,885
617			31100	1991	$	437,795	1.84	$	804,643
618			31100	1992	$	238,226	1.80	$	428,107
619			31100	1993	$	345,918	1.72	$	596,218
620			31100	1994	$	201,563	1.64	$	331,499
621			31100	1995	$	19,914	1.59	$	31,755
622			31100	1997	$	209,133	1.52	$	318,802
623			31100	1998	$	2,422	1.50	$	3,621
624			31100	1999	$	31,723	1.45	$	46,111
625			31100	2000	$	170,023	1.38	$	234,983
626			31100	2001	$	737,857	1.32	$	973,285
627			31100	2002	$	316,601	1.27	$	402,293
628			31100	2003	$	12,148,187	1.24	$	15,109,508
629			31100	2004	$	279,428	1.17	$	326,594
630			31100	2005	$	127,518	1.10	$	140,330
631			31100	2006	$	399,804	1.05	$	421,094
632			31100	2007	$	1,320,465	1.00	$	1,320,465
633			31100	Total	$	59,159,672		$	317,831,082
634									

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
635		Boiler Plant Equipment	31210	1931	$	31,990	34.03	$	1,088,611
636			31210	1937	$	483	28.66	$	13,839
637			31210	1942	$	346	24.75	$	8,574
638			31210	1950	$	90,493	14.33	$	1,296,620
639			31210	1952	$	4,819	12.96	$	62,471
640			31210	1954	$	594,760	11.84	$	7,039,886
641			31210	1955	$	15,773	11.34	$	178,919
642			31210	1956	$	2,832	10.08	$	28,557
643			31210	1959	$	9,934	8.51	$	84,515
644			31210	1961	$	433	8.51	$	3,680
645			31210	1964	$	5,532	8.25	$	45,639
646			31210	1965	$	6,050	8.01	$	48,442
647			31210	1967	$	4,326	7.67	$	33,172
648			31210	1968	$	3,216	7.36	$	23,666
649			31210	1969	$	3,295	7.07	$	23,297
650			31210	1973	$	9,437	5.44	$	51,384
651			31210	1974	$	35,535,327	4.54	$	161,235,498
652			31210	1976	$	48,612	3.61	$	175,286
653			31210	1977	$	50,754	3.38	$	171,642
654			31210	1978	$	28,934	3.09	$	89,513
655			31210	1979	$	1,144,589	2.82	$	3,229,043
656			31210	1980	$	2,476,591	2.58	$	6,390,773
657			31210	1981	$	297,074	2.37	$	703,263
658			31210	1982	$	6,162,552	2.25	$	13,865,223
659			31210	1983	$	479,953	2.20	$	1,053,729
660			31210	1984	$	606,821	2.11	$	1,280,627
661			31210	1985	$	6,395,950	2.05	$	13,091,970
662			31210	1986	$	3,493,211	2.02	$	7,044,379
663			31210	1987	$	2,050,777	1.94	$	3,987,879
664			31210	1988	$	546,743	1.83	$	1,002,325
665			31210	1989	$	3,939,556	1.76	$	6,936,162
666			31210	1990	$	4,452,772	1.68	$	7,500,212
667			31210	1991	$	595,959	1.65	$	983,296
668			31210	1992	$	23,692,063	1.61	$	38,250,095
669			31210	1993	$	236,309	1.57	$	370,527
670			31210	1994	$	244,185	1.52	$	370,345
671			31210	1995	$	8,875,507	1.48	$	13,105,172
672			31210	1996	$	754,418	1.44	$	1,088,840
673			31210	1997	$	350,588	1.41	$	495,812
674			31210	1998	$	7,694,383	1.39	$	10,666,924
675			31210	1999	$	3,008,272	1.36	$	4,084,646
676			31210	2000	$	2,791,973	1.30	$	3,625,933
677			31210	2001	$	4,053,592	1.25	$	5,050,567
678			31210	2002	$	10,388,075	1.21	$	12,527,342
679			31210	2003	$	54,471,709	1.19	$	65,005,443
680			31210	2004	$	2,376,240	1.14	$	2,718,097
681			31210	2005	$	6,235,966	1.09	$	6,767,028
682			31210	2006	$	3,747,527	1.04	$	3,905,171
683			31210	2007	$	6,670,552	1.00	$	6,670,552
684			31210	Total	$	204,681,253		$	413,474,584
685									
686		Boiler Pl Eq, Mobile Fuel Hdl	31220	1931	$	500	34.03	$	17,015
687			31220	1968	$	291,538	7.36	$	2,145,089
688			31220	1978	$	81,388	3.09	$	251,784
689			31220	1987	$	434,700	1.94	$	845,305
690			31220	1998	$	1,101,120	1.39	$	1,526,512
691			31220	2000	$	454,716	1.30	$	590,539
692			31220	2001	$	191,615	1.25	$	238,743
693			31220	2002	$	248,316	1.21	$	299,453
694			31220	2003	$	211,744	1.19	$	252,691
695			31220	2004	$	45,940	1.14	$	52,549
696			31220	2006	$	149,588	1.04	$	155,880
697			31220	Total	$	3,211,165		$	6,375,560
698									
699		Boiler Pl Eq, Coal Pile Base	31250	1982	$	664,033	2.25	$	1,494,018
700			31250	Total	$	664,033		$	1,494,018
701									
702		Turbogenerator Units	31400	1950	$	84	10.49	$	882
703			31400	1961	$	(0)	7.19	$	-
704			31400	1974	$	29,459,735	4.58	$	134,840,141
705			31400	1978	$	185,287	3.05	$	565,386

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
706			31400	1980	$	14,259	2.53	$	36,076
707			31400	1981	$	207,384	2.29	$	474,608
708			31400	1982	$	301,050	2.15	$	647,747
709			31400	1983	$	349,350	2.04	$	712,109
710			31400	1985	$	56,070	1.95	$	109,420
711			31400	1986	$	662,717	1.96	$	1,298,310
712			31400	1987	$	4,996,621	1.91	$	9,565,412
713			31400	1989	$	860,551	1.74	$	1,500,505
714			31400	1990	$	608,236	1.71	$	1,039,848
715			31400	1992	$	1,517,867	1.65	$	2,509,744
716			31400	1995	$	271,569	1.47	$	398,920
717			31400	1996	$	507,201	1.44	$	731,185
718			31400	1997	$	110,226	1.40	$	153,838
719			31400	1998	$	28,661	1.37	$	39,320
720			31400	1999	$	862,038	1.35	$	1,164,372
721			31400	2000	$	28,890	1.29	$	37,224
722			31400	2001	$	80,640	1.27	$	102,527
723			31400	2002	$	33,969	1.22	$	41,386
724			31400	2003	$	1,235	1.16	$	1,430
725			31400	2004	$	146,539	1.13	$	165,425
726			31400	2005	$	9,570	1.08	$	10,379
727			31400	2006	$	595,045	1.04	$	618,996
728			31400	2007	$	1,527,103	1.00	$	1,527,103
729			31400	Total	$	43,421,898		$	158,292,292
730									
731		Accessory Elect Equipment	31500	1936	$	218,886	22.13	$	4,843,190
732			31500	1939	$	12,926	20.79	$	268,681
733			31500	1940	$	2	20.79	$	48
734			31500	1941	$	455	20.17	$	9,186
735			31500	1942	$	286	20.17	$	5,760
736			31500	1949	$	121,847	14.91	$	1,816,915
737			31500	1950	$	650,853	14.00	$	9,110,932
738			31500	1951	$	18,352	12.03	$	220,842
739			31500	1952	$	19,487	11.83	$	230,459
740			31500	1953	$	52,986	11.24	$	595,814
741			31500	1954	$	58,098	11.06	$	642,757
742			31500	1955	$	144	10.72	$	1,547
743			31500	1958	$	960,452	9.40	$	9,024,613
744			31500	1959	$	998	9.27	$	9,248
745			31500	1960	$	132,931	10.09	$	1,340,894
746			31500	1965	$	931,432	10.39	$	9,680,175
747			31500	1966	$	163,118	10.24	$	1,669,950
748			31500	1967	$	1,271,870	9.53	$	12,116,753
749			31500	1968	$	115,089	9.03	$	1,038,717
750			31500	1969	$	9,861	8.36	$	82,489
751			31500	1970	$	27,229	7.79	$	212,239
752			31500	1971	$	1,105	7.38	$	8,151
753			31500	1972	$	430,127	7.07	$	3,041,592
754			31500	1973	$	15,939	6.86	$	109,331
755			31500	1974	$	10,511,458	5.91	$	62,155,696
756			31500	1975	$	291,201	5.08	$	1,479,569
757			31500	1979	$	92,181	3.83	$	353,235
758			31500	1980	$	1,021,950	3.54	$	3,613,300
759			31500	1981	$	7,433	3.18	$	23,603
760			31500	1982	$	47,952	2.82	$	135,355
761			31500	1983	$	322,925	2.73	$	882,478
762			31500	1984	$	317,503	2.78	$	881,711
763			31500	1985	$	874,126	2.75	$	2,407,967
764			31500	1986	$	3,337,726	2.70	$	9,013,489
765			31500	1987	$	42,573	2.68	$	114,069
766			31500	1988	$	15,319	2.38	$	36,516
767			31500	1989	$	95,293	2.27	$	216,435
768			31500	1990	$	6,057	2.20	$	13,306
769			31500	1991	$	1,277	2.16	$	2,756
770			31500	1992	$	3,084,850	2.08	$	6,421,768
771			31500	1993	$	363,027	2.01	$	730,231
772			31500	1994	$	420,998	1.96	$	823,887
773			31500	1995	$	2,885	1.86	$	5,378
774			31500	1996	$	175,859	1.81	$	318,273
775			31500	1998	$	1,488	1.73	$	2,578
776			31500	1999	$	198,081	1.68	$	333,420

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
777			31500	2000	$	15,317	1.59	$	24,292
778			31500	2001	$	79,371	1.49	$	118,097
779			31500	2002	$	110,642	1.40	$	154,645
780			31500	2003	$	6,285,771	1.35	$	8,512,460
781			31500	2004	$	67,854	1.29	$	87,858
782			31500	2005	$	17,610	1.19	$	20,988
783			31500	2006	$	73,301	1.10	$	80,802
784			31500	2007	$	3,898,801	1.00	$	3,898,801
785			31500	Total	$	36,995,303		$	158,943,247
786									
787		Misc Pwr Plant Equipment	31600	1936	$	111	28.03	$	3,112
788			31600	1943	$	6	23.36	$	143
789			31600	1950	$	145	14.36	$	2,078
790			31600	1974	$	748,326	4.79	$	3,582,786
791			31600	1976	$	248,190	4.04	$	1,003,427
792			31600	1979	$	4,729	3.10	$	14,665
793			31600	1980	$	178,192	2.84	$	506,550
794			31600	1982	$	1,673,402	2.32	$	3,886,576
795			31600	1984	$	66,157	2.14	$	141,603
796			31600	1985	$	574,946	2.04	$	1,175,305
797			31600	1986	$	36,938	2.01	$	74,122
798			31600	1988	$	46,156	1.86	$	85,980
799			31600	1990	$	23,786	1.74	$	41,411
800			31600	1993	$	639,858	1.61	$	1,032,477
801			31600	1994	$	434,453	1.53	$	665,614
802			31600	1998	$	7,957	1.39	$	11,086
803			31600	1999	$	3,753	1.35	$	5,073
804			31600	2000	$	26,118	1.29	$	33,801
805			31600	2001	$	104,834	1.25	$	131,085
806			31600	2002	$	126,872	1.21	$	153,711
807			31600	2003	$	41,423	1.19	$	49,472
808			31600	2006	$	21,873	1.02	$	22,242
809			31600	2007	$	478,926	1.00	$	478,926
810			31600	Total	$	5,487,152		$	13,101,244
811									
812	Michigan City Total				$	354,009,906		$	1,093,483,295
813									
814	Norway	Accessory Elect Equipment	31500	1995	$	1,658	1.86	$	3,090
815			31500	2002	$	0	1.40	$	0
816			31500	Total	$	1,658		$	3,090
817									
818		Land	33010	1944	$	15,641	43.96	$	687,523
819			33010	Total	$	15,641		$	687,523
820									
821		Structures and Improvements	33100	1923	$	507	26.93	$	13,654
822			33100	1924	$	61,924	26.93	$	1,667,688
823			33100	1942	$	1,416	24.24	$	34,324
824			33100	1945	$	253	22.03	$	5,584
825			33100	1947	$	607	17.31	$	10,501
826			33100	1951	$	394	13.10	$	5,158
827			33100	1960	$	113	8.98	$	1,011
828			33100	1963	$	6,703	8.81	$	59,080
829			33100	1964	$	1,823	8.66	$	15,782
830			33100	1965	$	1,103	8.36	$	9,218
831			33100	1966	$	6,608	8.08	$	53,389
832			33100	1967	$	976	7.82	$	7,635
833			33100	1968	$	1,101	7.34	$	8,087
834			33100	1969	$	787	6.83	$	5,376
835			33100	1980	$	23,643	2.63	$	62,288
836			33100	1982	$	17,755	2.38	$	42,191
837			33100	1984	$	2,136	2.19	$	4,686
838			33100	1985	$	27,400	2.13	$	58,256
839			33100	1986	$	12,994	2.07	$	26,918
840			33100	1987	$	11,364	2.02	$	22,954
841			33100	1989	$	28,490	1.86	$	52,915
842			33100	1990	$	55,715	1.83	$	102,207
843			33100	1991	$	13,081	1.84	$	24,042
844			33100	1992	$	69,235	1.80	$	124,420
845			33100	1994	$	148,775	1.64	$	244,682
846			33100	1995	$	65,045	1.59	$	103,721
847			33100	1996	$	97,069	1.56	$	151,180

Reproduction Cost New by Vintage Year

Line No.	Plant (a)	FERC Account (b)	FERC Account (c)	Installation Year (d)	Original Cost (e)	Adjustment Factor (f)	Reproduction Cost (g)
848			33100	1999	$ 123,742	1.45	$ 179,866
849			33100	2002	$ 244,499	1.27	$ 310,675
850			33100	2003	$ 1,751	1.24	$ 2,177
851			33100	2006	$ 50,499	1.05	$ 53,188
852			33100	Total	$ 1,077,508		$ 3,462,850
853							
854		Reservoirs, Dams & Waterway	33200	1924	$ 375,977	23.78	$ 8,940,530
855			33200	1926	$ 443	23.78	$ 10,537
856			33200	1929	$ 27,615	23.78	$ 656,669
857			33200	1962	$ 1,108	7.51	$ 8,322
858			33200	1970	$ 2,158	5.35	$ 11,546
859			33200	1983	$ 47,404	2.05	$ 97,083
860			33200	1985	$ 51,743	1.92	$ 99,317
861			33200	1987	$ 847,093	1.81	$ 1,529,880
862			33200	1989	$ 12,785	1.72	$ 22,000
863			33200	1995	$ 159,436	1.50	$ 238,405
864			33200	1996	$ 58,759	1.45	$ 85,256
865			33200	1997	$ 323,679	1.41	$ 457,998
866			33200	2001	$ 48,974	1.28	$ 62,527
867			33200	2007	$ 101,344	1.00	$ 101,344
868			33200	Total	$ 2,058,519		$ 12,321,414
869							
870		Water Wheels, Turbines, Gen	33300	1924	$ 29,842	37.05	$ 1,105,496
871			33300	1949	$ 240	12.70	$ 3,049
872			33300	1960	$ 785	6.74	$ 5,285
873			33300	1963	$ 42,977	6.84	$ 293,924
874			33300	1970	$ 1,014	5.36	$ 5,431
875			33300	1985	$ 68,760	1.63	$ 112,379
876			33300	1986	$ 95,424	1.63	$ 155,385
877			33300	1987	$ 65,585	1.60	$ 104,877
878			33300	1990	$ 116,357	1.40	$ 163,432
879			33300	1991	$ 105,812	1.35	$ 143,191
880			33300	1992	$ 86,977	1.35	$ 117,702
881			33300	1994	$ 193,877	1.28	$ 249,096
882			33300	1996	$ 45,231	1.22	$ 55,354
883			33300	1999	$ 287,537	1.16	$ 332,441
884			33300	2000	$ 275,568	1.13	$ 310,920
885			33300	2001	$ 63,052	1.14	$ 71,733
886			33300	2005	$ 62,387	1.11	$ 69,378
887			33300	Total	$ 1,541,425		$ 3,299,070
888							
889		Accessory Electric Equipmnt	33400	1924	$ 9,149	27.65	$ 252,970
890			33400	1943	$ 180	21.07	$ 3,790
891			33400	1955	$ 321	9.62	$ 3,091
892			33400	1965	$ 55,371	7.14	$ 395,113
893			33400	1985	$ 24,067	1.87	$ 44,928
894			33400	1986	$ 114,915	1.83	$ 210,084
895			33400	1989	$ 58,999	1.66	$ 98,128
896			33400	1992	$ 18,926	1.60	$ 30,338
897			33400	1994	$ 18,512	1.48	$ 27,484
898			33400	1995	$ 210,064	1.44	$ 303,217
899			33400	1996	$ 1,200	1.40	$ 1,685
900			33400	1999	$ 952,815	1.31	$ 1,249,941
901			33400	2000	$ 54,736	1.27	$ 69,687
902			33400	2001	$ 93,644	1.25	$ 116,786
903			33400	2007	$ 8,598	1.00	$ 8,598
904			33400	Total	$ 1,621,496		$ 2,815,838
905							
906		Misc Power Plant Equipment	33500	1950	$ 140	12.64	$ 1,775
907			33500	1952	$ 368	11.06	$ 4,066
908			33500	1981	$ 333	2.15	$ 714
909			33500	1982	$ 3,034	2.07	$ 6,272
910			33500	1983	$ 19,327	1.99	$ 38,515
911			33500	1985	$ 2,559	1.87	$ 4,777
912			33500	1990	$ 7,430	1.64	$ 12,187
913			33500	1998	$ 1,007	1.34	$ 1,351
914			33500	Total	$ 34,197		$ 69,657
915							
916	Norway Total				$ 6,350,445		$ 22,659,443
917							
918	Oakdale	Accessory Elect Equipment	31500	1996	$ 5,805	1.81	$ 10,507

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
	(a)	(b)	(c)	(d)		(e)	(f)		(g)
919			31500	2001	$	1,125	1.49	$	1,674
920			31500	2002	$	0	1.40	$	0
921			31500	Total	$	6,931		$	12,181
922									
923		Land	33010	1947	$	7,496	31.75	$	237,971
924			33010	Total	$	7,496		$	237,971
925									
926		Structures and Improvements	33100	1924	$	478	26.93	$	12,862
927			33100	1925	$	57,592	26.93	$	1,551,007
928			33100	1942	$	1,586	24.24	$	38,440
929			33100	1958	$	459	9.51	$	4,361
930			33100	1963	$	2,948	8.81	$	25,983
931			33100	1979	$	4,159	2.87	$	11,931
932			33100	1982	$	24,765	2.38	$	58,849
933			33100	1983	$	5,665	2.29	$	12,953
934			33100	1985	$	22,562	2.13	$	47,969
935			33100	1986	$	29,745	2.07	$	61,621
936			33100	1987	$	4,803	2.02	$	9,702
937			33100	1988	$	82,360	1.94	$	159,379
938			33100	1989	$	57,651	1.86	$	107,075
939			33100	1990	$	170,843	1.83	$	313,406
940			33100	1991	$	7,172	1.84	$	13,182
941			33100	1992	$	374,075	1.80	$	672,237
942			33100	1994	$	154,369	1.64	$	253,882
943			33100	1995	$	5,988	1.59	$	9,548
944			33100	1996	$	12,177	1.56	$	18,965
945			33100	1997	$	2,041	1.52	$	3,112
946			33100	1998	$	27	1.50	$	41
947			33100	1999	$	104,316	1.45	$	151,628
948			33100	2001	$	282,127	1.32	$	372,145
949			33100	2002	$	244,499	1.27	$	310,675
950			33100	2007	$	227,534	1.00	$	227,534
951			33100	Total	$	1,879,941		$	4,448,487
952									
953		Reservoirs, Dams & Waterway	33200	1924	$	287	23.78	$	6,814
954			33200	1925	$	918,341	23.78	$	21,837,654
955			33200	1929	$	287	23.78	$	6,814
956			33200	1950	$	50	12.23	$	613
957			33200	1955	$	328	9.51	$	3,123
958			33200	1961	$	1,143	7.64	$	8,733
959			33200	1983	$	65,292	2.05	$	133,717
960			33200	1984	$	389,400	1.97	$	768,088
961			33200	1985	$	14,400	1.92	$	27,640
962			33200	1986	$	544,391	1.86	$	1,013,112
963			33200	1987	$	61,567	1.81	$	111,193
964			33200	1989	$	37,314	1.72	$	64,208
965			33200	1991	$	141,452	1.71	$	241,459
966			33200	1993	$	244,195	1.60	$	391,472
967			33200	1996	$	355,553	1.45	$	515,890
968			33200	2000	$	215,169	1.31	$	281,648
969			33200	2001	$	48,974	1.28	$	62,527
970			33200	2002	$	247,760	1.24	$	308,057
971			33200	2004	$	233,199	1.15	$	268,323
972			33200	2005	$	135,638	1.10	$	148,960
973			33200	2006	$	208,089	1.05	$	219,380
974			33200	2007	$	49,080	1.00	$	49,080
975			33200	Total	$	3,911,909		$	26,468,506
976									
977		Water Wheels, Turbines, Gen	33300	1924	$	245	37.05	$	9,082
978			33300	1925	$	136,263	37.05	$	5,047,921
979			33300	1929	$	14,080	31.75	$	447,074
980			33300	1946	$	246	17.10	$	4,202
981			33300	1960	$	19,096	6.74	$	128,622
982			33300	1963	$	267	6.84	$	1,828
983			33300	1971	$	1,240	4.99	$	6,194
984			33300	1983	$	1,654,194	1.73	$	2,861,338
985			33300	1985	$	1,378	1.63	$	2,252
986			33300	1987	$	6,723	1.60	$	10,751
987			33300	1989	$	86,550	1.44	$	124,315
988			33300	1991	$	67,153	1.35	$	90,876
989			33300	1992	$	66,655	1.35	$	90,201

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost	Adjustment Factor	Reproduction Cost
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
990			33300	1996	$ 28,745	1.22	$ 35,179
991			33300	1997	$ 39,278	1.19	$ 46,593
992			33300	1999	$ 30,521	1.16	$ 35,287
993			33300	2000	$ 487,033	1.13	$ 549,513
994			33300	2001	$ 55,434	1.14	$ 63,065
995			33300	2005	$ 296,940	1.11	$ 330,214
996			33300	Total	$ 2,992,041		$ 9,884,509
997							
998		Accessory Electric Equipmnt	33400	1925	$ 23,065	27.65	$ 637,760
999			33400	1947	$ 1,961	15.26	$ 29,911
1000			33400	1949	$ 2,802	13.01	$ 36,465
1001			33400	1951	$ 180	11.64	$ 2,094
1002			33400	1958	$ 290	8.04	$ 2,336
1003			33400	1962	$ 329	7.50	$ 2,466
1004			33400	1967	$ 894	6.60	$ 5,905
1005			33400	1981	$ 1,268	2.15	$ 2,723
1006			33400	1985	$ 15,696	1.87	$ 29,301
1007			33400	1986	$ 111,425	1.83	$ 203,705
1008			33400	1989	$ 48,842	1.66	$ 81,236
1009			33400	1992	$ 0	1.60	$ 0
1010			33400	1996	$ 1,780	1.40	$ 2,500
1011			33400	1999	$ 135,838	1.31	$ 178,198
1012			33400	2000	$ 42,595	1.27	$ 54,229
1013			33400	Total	$ 386,966		$ 1,268,829
1014							
1015		Misc Power Plant Equipment	33500	1925	$ 2,039	27.65	$ 56,374
1016			33500	1948	$ 245	13.41	$ 3,279
1017			33500	1949	$ 38	13.01	$ 493
1018			33500	1950	$ 179	12.64	$ 2,263
1019			33500	1952	$ 175	11.06	$ 1,938
1020			33500	1953	$ 597	10.29	$ 6,144
1021			33500	1954	$ 86	10.05	$ 863
1022			33500	1974	$ 147	3.81	$ 560
1023			33500	1981	$ 951	2.15	$ 2,043
1024			33500	1986	$ 1,693	1.83	$ 3,095
1025			33500	1990	$ 10,828	1.64	$ 17,759
1026			33500	1995	$ 41,227	1.44	$ 59,509
1027			33500	1998	$ (0)	1.34	$ -
1028			33500	Total	$ 58,205		$ 154,322
1029							
1030	Oakdale Total				$ 9,243,489		$ 42,474,805
1031							
1032	RM Schahfer	Land and Land Rights	31010	1976	$ 3,236,431	4.50	$ 14,578,520
1033			31010	1999	$ 40,460	1.84	$ 74,580
1034			31010	2000	$ 12,998	1.77	$ 23,005
1035			31010	2004	$ (40,460)	1.44	$ (58,426)
1036			31010	2005	$ 84,139	1.27	$ 107,183
1037			31010	2006	$ 6,771	1.10	$ 7,461
1038			31010	Total	$ 3,340,339		$ 14,732,324
1039							
1040		Structures and Improvements	31100	1931	$ 24,848	30.30	$ 752,837
1041			31100	1948	$ 27,219	15.15	$ 412,336
1042			31100	1973	$ 573	4.85	$ 2,780
1043			31100	1976	$ 53,606,080	3.64	$ 195,383,269
1044			31100	1978	$ 248,285	3.13	$ 776,503
1045			31100	1979	$ 30,857,242	2.87	$ 88,510,616
1046			31100	1980	$ 1,323,457	2.63	$ 3,486,720
1047			31100	1981	$ 2,467,726	2.46	$ 6,072,333
1048			31100	1982	$ 902,106	2.38	$ 2,143,644
1049			31100	1983	$ 169,123,952	2.29	$ 386,717,851
1050			31100	1984	$ 796,682	2.19	$ 1,747,503
1051			31100	1985	$ 3,669,769	2.13	$ 7,802,410
1052			31100	1986	$ 59,225,921	2.07	$ 122,693,322
1053			31100	1987	$ 204,554	2.02	$ 413,163
1054			31100	1988	$ 423,475	1.94	$ 819,493
1055			31100	1989	$ 1,201,239	1.86	$ 2,231,073
1056			31100	1990	$ 514,207	1.83	$ 943,296
1057			31100	1991	$ 41,535	1.84	$ 76,338
1058			31100	1992	$ 830,802	1.80	$ 1,493,004
1059			31100	1993	$ 637,585	1.72	$ 1,098,931
1060			31100	1994	$ 588,856	1.64	$ 968,456

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
1061			31100	1995	$	377,336	1.59	$	601,699
1062			31100	1996	$	4,951,545	1.56	$	7,711,810
1063			31100	1997	$	316,880	1.52	$	483,051
1064			31100	1998	$	2,185,965	1.50	$	3,268,047
1065			31100	1999	$	6,333,774	1.45	$	9,206,439
1066			31100	2000	$	201,142	1.38	$	277,990
1067			31100	2001	$	1,597,619	1.32	$	2,107,370
1068			31100	2002	$	658,380	1.27	$	836,580
1069			31100	2003	$	270,534	1.24	$	336,481
1070			31100	2004	$	1,321,954	1.17	$	1,545,094
1071			31100	2005	$	4,675,998	1.10	$	5,145,805
1072			31100	2006	$	1,022,016	1.05	$	1,076,438
1073			31100	2007	$	918,330	1.00	$	918,330
1074			31100	Total	$	351,547,585		$	858,061,012
1075									
1076		Boiler Plant Equipment	31210	1976	$	62,443,585	3.61	$	225,160,645
1077			31210	1978	$	2,423,707	3.09	$	7,498,063
1078			31210	1979	$	81,815,792	2.82	$	230,813,620
1079			31210	1980	$	849,671	2.58	$	2,192,552
1080			31210	1981	$	15,836,244	2.37	$	37,489,181
1081			31210	1982	$	5,586,323	2.25	$	12,568,755
1082			31210	1983	$	182,396,953	2.20	$	400,449,263
1083			31210	1984	$	883,651	2.11	$	1,864,844
1084			31210	1985	$	6,589,073	2.05	$	13,487,277
1085			31210	1986	$	149,776,443	2.02	$	302,037,834
1086			31210	1987	$	6,725,679	1.94	$	13,078,553
1087			31210	1988	$	2,517,648	1.83	$	4,615,516
1088			31210	1989	$	544,365	1.76	$	958,434
1089			31210	1990	$	21,495,443	1.68	$	36,206,744
1090			31210	1991	$	3,985,486	1.65	$	6,575,805
1091			31210	1992	$	3,323,639	1.61	$	5,365,912
1092			31210	1993	$	4,127,938	1.57	$	6,472,507
1093			31210	1994	$	47,246,063	1.52	$	71,656,036
1094			31210	1995	$	28,625,267	1.48	$	42,266,776
1095			31210	1996	$	16,907,298	1.44	$	24,402,063
1096			31210	1997	$	12,699,706	1.41	$	17,960,340
1097			31210	1998	$	5,305,328	1.39	$	7,354,915
1098			31210	1999	$	11,681,138	1.36	$	15,860,701
1099			31210	2000	$	6,617,462	1.30	$	8,594,092
1100			31210	2001	$	11,494,600	1.25	$	14,321,682
1101			31210	2002	$	27,196,304	1.21	$	32,796,971
1102			31210	2003	$	7,750,884	1.19	$	9,249,749
1103			31210	2004	$	99,341,730	1.14	$	113,633,495
1104			31210	2005	$	13,912,675	1.09	$	15,097,493
1105			31210	2006	$	7,091,573	1.04	$	7,389,888
1106			31210	2007	$	15,776,904	1.00	$	15,776,904
1107			31210	Total	$	862,968,574		$	1,703,196,610
1108									
1109		Boiler Pl Eq, Mobile Fuel Hdl	31220	1981	$	161,951	2.37	$	383,386
1110			31220	1982	$	207,232	2.25	$	466,254
1111			31220	1986	$	7,943	2.02	$	16,018
1112			31220	1990	$	533,961	1.68	$	899,399
1113			31220	1991	$	657,897	1.65	$	1,085,489
1114			31220	1995	$	528,505	1.48	$	780,366
1115			31220	1998	$	424,437	1.39	$	588,409
1116			31220	1999	$	986,075	1.36	$	1,338,896
1117			31220	2001	$	797,122	1.25	$	993,174
1118			31220	2002	$	874,175	1.21	$	1,054,198
1119			31220	2003	$	715,207	1.19	$	853,514
1120			31220	2004	$	849,434	1.14	$	971,638
1121			31220	2005	$	1,544,978	1.09	$	1,676,550
1122			31220	2006	$	394,985	1.04	$	411,601
1123			31220	2007	$	1,980,393	1.00	$	1,980,393
1124			31220	Total	$	10,664,295		$	13,499,285
1125									
1126		Boiler Pl Eq, Unit Train Coal	31230	2002	$	1,212,525	1.21	$	1,462,226
1127			31230	Total	$	1,212,525		$	1,462,226
1128									
1129		Boiler Pl Eq, SO2 Plant	31240	1976	$	13,754	3.61	$	49,596
1130			31240	1983	$	32,499,469	2.20	$	71,352,004
1131			31240	1985	$	29,137	2.05	$	59,642

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
1132			31240	1986	$	30,531,112	2.02	$	61,568,766
1133			31240	1987	$	446,955	1.94	$	869,135
1134			31240	1988	$	888,769	1.83	$	1,629,349
1135			31240	1989	$	1,198,329	1.76	$	2,109,833
1136			31240	1990	$	178,601	1.68	$	300,833
1137			31240	1991	$	689,647	1.65	$	1,137,875
1138			31240	1992	$	3,749,731	1.61	$	6,053,823
1139			31240	1993	$	2,266,595	1.57	$	3,553,966
1140			31240	1994	$	172,743	1.52	$	261,992
1141			31240	1995	$	1,249,230	1.48	$	1,844,557
1142			31240	1996	$	834,936	1.44	$	1,205,051
1143			31240	1997	$	21,694,056	1.41	$	30,680,443
1144			31240	1998	$	192,991	1.39	$	267,549
1145			31240	1999	$	2,418,996	1.36	$	3,284,523
1146			31240	2000	$	497,107	1.30	$	645,592
1147			31240	2001	$	7,579,470	1.25	$	9,443,630
1148			31240	2002	$	1,946,827	1.21	$	2,347,746
1149			31240	2003	$	647,363	1.19	$	772,550
1150			31240	2004	$	1,731,880	1.14	$	1,981,036
1151			31240	2005	$	187,448	1.09	$	203,411
1152			31240	2006	$	1,098,651	1.04	$	1,144,867
1153			31240	2007	$	722,362	1.00	$	722,362
1154			31240	Total	$	113,466,157		$	203,490,132
1155									
1156		Boiler Pl Eq. Coal Pile Base	31250	1982	$	1,829,921	2.25	$	4,117,168
1157			31250	1983	$	2,400,176	2.20	$	5,269,545
1158			31250	Total	$	4,230,098		$	9,386,713
1159									
1160		Turbogenerator Units	31400	1976	$	27,005,721	3.60	$	97,120,475
1161			31400	1979	$	39,123,340	2.75	$	107,638,560
1162			31400	1980	$	52,005	2.53	$	131,577
1163			31400	1981	$	1,035,042	2.29	$	2,368,744
1164			31400	1982	$	1,805,045	2.15	$	3,883,786
1165			31400	1983	$	76,955,195	2.04	$	156,864,272
1166			31400	1984	$	290,235	1.97	$	573,050
1167			31400	1985	$	233,342	1.95	$	455,362
1168			31400	1986	$	85,882,704	1.96	$	168,250,218
1169			31400	1987	$	397,137	1.91	$	760,270
1170			31400	1988	$	634,515	1.80	$	1,141,971
1171			31400	1989	$	9,667,475	1.74	$	16,856,760
1172			31400	1990	$	427,666	1.71	$	731,144
1173			31400	1991	$	240,821	1.68	$	404,500
1174			31400	1992	$	454,256	1.65	$	751,098
1175			31400	1993	$	167,394	1.60	$	267,768
1176			31400	1994	$	52,849	1.52	$	80,510
1177			31400	1995	$	484,877	1.47	$	712,258
1178			31400	1996	$	4,101,764	1.44	$	5,913,129
1179			31400	1997	$	6,206,224	1.40	$	8,661,721
1180			31400	1998	$	1,478,496	1.37	$	2,028,323
1181			31400	1999	$	1,554,088	1.35	$	2,099,138
1182			31400	2000	$	911,742	1.29	$	1,174,778
1183			31400	2001	$	4,870,957	1.27	$	6,193,015
1184			31400	2002	$	2,129,571	1.22	$	2,594,551
1185			31400	2003	$	246,983	1.16	$	286,030
1186			31400	2004	$	3,817,877	1.13	$	4,309,929
1187			31400	2005	$	2,315,680	1.08	$	2,511,364
1188			31400	2006	$	4,739,826	1.04	$	4,930,604
1189			31400	2007	$	1,651,176	1.00	$	1,651,176
1190			31400	Total	$	278,934,006		$	601,346,080
1191									
1192		Accessory Elect Equipment	31500	1949	$	404,886	14.91	$	6,037,406
1193			31500	1950	$	194,017	14.00	$	2,715,935
1194			31500	1954	$	23,061	11.06	$	255,135
1195			31500	1955	$	125,743	10.72	$	1,347,662
1196			31500	1958	$	391,850	9.40	$	3,681,904
1197			31500	1960	$	6,270	10.09	$	63,242
1198			31500	1961	$	87,787	11.43	$	1,003,587
1199			31500	1963	$	671	11.63	$	7,796
1200			31500	1964	$	13,277	11.06	$	146,889
1201			31500	1965	$	4,951,804	10.39	$	51,463,047
1202			31500	1966	$	496,025	10.24	$	5,078,138

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
1203			31500	1967	$	840,899	9.53	$	8,011,009
1204			31500	1968	$	411,756	9.03	$	3,716,223
1205			31500	1972	$	1,647,214	7.07	$	11,648,081
1206			31500	1973	$	712,093	6.86	$	4,884,418
1207			31500	1974	$	9,626	5.91	$	56,921
1208			31500	1975	$	72,307	5.08	$	367,384
1209			31500	1976	$	17,266,230	4.80	$	82,820,423
1210			31500	1978	$	138,102	4.13	$	570,647
1211			31500	1979	$	15,164,926	3.83	$	58,111,650
1212			31500	1980	$	44,286	3.54	$	156,583
1213			31500	1981	$	182,300	3.18	$	578,908
1214			31500	1982	$	3,509,635	2.82	$	9,906,760
1215			31500	1983	$	60,045,373	2.73	$	164,089,873
1216			31500	1984	$	749,336	2.78	$	2,080,922
1217			31500	1985	$	845,214	2.75	$	2,328,323
1218			31500	1986	$	41,985,798	2.70	$	113,382,140
1219			31500	1987	$	3,944,084	2.68	$	10,567,742
1220			31500	1988	$	2,149,070	2.38	$	5,122,846
1221			31500	1989	$	779,642	2.27	$	1,770,778
1222			31500	1990	$	3,821,591	2.20	$	8,394,942
1223			31500	1991	$	284,328	2.16	$	613,777
1224			31500	1992	$	771,547	2.08	$	1,606,139
1225			31500	1993	$	390,341	2.01	$	785,173
1226			31500	1994	$	924,546	1.96	$	1,809,324
1227			31500	1995	$	1,464,247	1.86	$	2,729,244
1228			31500	1996	$	214,034	1.81	$	387,364
1229			31500	1997	$	1,259,001	1.77	$	2,227,154
1230			31500	1998	$	1,560,898	1.73	$	2,703,680
1231			31500	1999	$	3,378,163	1.68	$	5,686,290
1232			31500	2000	$	1,454,372	1.59	$	2,306,563
1233			31500	2001	$	1,960,083	1.49	$	2,916,416
1234			31500	2002	$	1,155,877	1.40	$	1,615,576
1235			31500	2003	$	257,817	1.35	$	349,146
1236			31500	2004	$	968,920	1.29	$	1,254,564
1237			31500	2005	$	1,493,284	1.19	$	1,779,807
1238			31500	2006	$	954,340	1.10	$	1,051,996
1239			31500	2007	$	1,453,175	1.00	$	1,453,175
1240			31500	Total	$	180,959,845		$	591,642,699
1241									
1242		Misc Pwr Plant Equipment	31600	1976	$	1,902,876	4.04	$	7,693,278
1243			31600	1978	$	449	3.41	$	1,531
1244			31600	1979	$	2,098,077	3.10	$	6,506,441
1245			31600	1981	$	59,873	2.54	$	151,994
1246			31600	1982	$	56,977	2.32	$	132,332
1247			31600	1983	$	10,420,043	2.22	$	23,119,003
1248			31600	1984	$	46,468	2.14	$	99,459
1249			31600	1985	$	206,966	2.04	$	423,081
1250			31600	1986	$	5,416,600	2.01	$	10,869,074
1251			31600	1987	$	66,184	1.95	$	129,012
1252			31600	1988	$	10,954	1.86	$	20,405
1253			31600	1989	$	49,048	1.79	$	87,916
1254			31600	1990	$	14,464	1.74	$	25,182
1255			31600	1991	$	53,890	1.71	$	92,204
1256			31600	1992	$	20,640	1.67	$	34,530
1257			31600	1994	$	1,891,738	1.53	$	2,898,283
1258			31600	1995	$	33,529	1.49	$	50,035
1259			31600	1996	$	61,947	1.47	$	91,012
1260			31600	1997	$	876,784	1.43	$	1,250,293
1261			31600	1998	$	120,869	1.39	$	168,400
1262			31600	1999	$	113,038	1.35	$	152,808
1263			31600	2000	$	12,886	1.29	$	16,676
1264			31600	2001	$	400,593	1.25	$	500,903
1265			31600	2002	$	237,521	1.21	$	287,768
1266			31600	2003	$	48,367	1.19	$	57,765
1267			31600	2004	$	124,350	1.13	$	140,373
1268			31600	2005	$	484,170	1.06	$	511,142
1269			31600	2006	$	744,595	1.02	$	757,151
1270			31600	2007	$	113,760	1.00	$	113,760
1271			31600	Total	$	25,687,653		$	56,381,808
1272									
1273		Land Rights	34020	1979	$	8,727	2.52	$	21,969

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost	Adjustment Factor	Reproduction Cost
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1274			34020	2002	$ 55	1.63	$ 89
1275			34020	Total	$ 8,782		$ 22,058
1276							
1277		Structures and Improvments	34100	1979	$ 1,312,369	2.99	$ 3,928,533
1278			34100	1983	$ 13,909	2.29	$ 31,892
1279			34100	1984	$ 143,431	2.26	$ 324,722
1280			34100	1986	$ 131,055	2.20	$ 288,226
1281			34100	1998	$ 4,642	1.40	$ 6,501
1282			34100	2000	$ 2,142	1.26	$ 2,693
1283			34100	2006	$ 2,440	1.15	$ 2,808
1284			34100	Total	$ 1,609,988		$ 4,585,375
1285							
1286		Fuel Holders	34200	1979	$ 5,610,314	2.75	$ 15,410,680
1287			34200	1984	$ 49,099	2.13	$ 104,450
1288			34200	1985	$ 28,901	2.07	$ 59,705
1289			34200	1986	$ 2,699,339	2.02	$ 5,441,413
1290			34200	1996	$ 23,805	1.50	$ 35,657
1291			34200	Total	$ 8,411,458		$ 21,051,905
1292							
1293		Prime Movers	34300	1979	$ 17,049,706	2.99	$ 51,037,710
1294			34300	1980	$ 867,096	2.79	$ 2,420,788
1295			34300	1986	$ 414,023	2.20	$ 910,552
1296			34300	1989	$ 455,753	1.62	$ 738,003
1297			34300	1996	$ 16,483	1.47	$ 24,151
1298			34300	1998	$ 135,151	1.40	$ 189,272
1299			34300	1999	$ 641,139	1.35	$ 865,274
1300			34300	2000	$ 86,767	1.26	$ 109,106
1301			34300	2001	$ 70,306	1.28	$ 90,090
1302			34300	Total	$ 19,736,424		$ 56,384,947
1303							
1304		Generators	34400	1979	$ 4,772,113	2.95	$ 14,099,101
1305			34400	2007	$ 64,666	1.00	$ 64,666
1306			34400	Total	$ 4,836,779		$ 14,163,767
1307							
1308		Accessory Electric Eq	34500	1979	$ 581,016	2.99	$ 1,739,251
1309			34500	1985	$ 301,264	2.24	$ 673,561
1310			34500	1995	$ 759,859	1.52	$ 1,152,513
1311			34500	Total	$ 1,642,139		$ 3,565,325
1312							
1313		Misc Power Plant Eq	34600	1979	$ 83,785	2.99	$ 250,807
1314			34600	Total	$ 83,785		$ 250,807
1315							
1316	RM Schahfer Total				$ 1,869,340,433		$ 4,153,223,073
1317							
1318		Franchises & Consents	30200	1936	$ 902	1.00	$ 902
1319			30200	1940	$ 131	1.00	$ 131
1320			30200	1980	$ 357	1.00	$ 357
1321			30200	Total	$ 1,389		$ 1,389
1322							
1323							
1324							
1325			30300	1997	$ 1,506,352	1.00	$ 1,506,352
1326			30300	1998	$ 31	1.00	$ 31
1327			30300	1999	$ 2,693,707	1.00	$ 2,693,707
1328			30300	2000	$ 3,622,969	1.00	$ 3,622,969
1329			30300	2001	$ 2,272,468	1.00	$ 2,272,468
1330			30300	2002	$ 3,774,640	1.00	$ 3,774,640
1331			30300	2003	$ 1,186,227	1.00	$ 1,186,227
1332			30300	2004	$ 4,723,383	1.00	$ 4,723,383
1333			30300	2005	$ 1,856,338	1.00	$ 1,856,338
1334			30300	2006	$ 202,666	1.00	$ 202,666
1335			30300	2007	$ 2,641,107	1.00	$ 2,641,107
1336			30300	Total	$ 26,430,151		$ 26,430,151
1337							
1338		Boiler Plant Equipment	31210	2000	$ (0)	1.30	$ -
1339			31210	Total	$ (0)		$ -
1340							
1341		Land	35010	1944	$ 765,212	43.96	$ 33,635,683
1342			35010	1945	$ 102,616	40.00	$ 4,104,650
1343			35010	1946	$ 451	34.48	$ 15,550
1344			35010	1947	$ 33,020	31.75	$ 1,048,263

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
1345			35010	1948	$ 7,725	29.41	$ 227,199
1346			35010	1949	$ 347	28.78	$ 9,990
1347			35010	1950	$ 12,754	29.20	$ 372,372
1348			35010	1951	$ 16,299	24.24	$ 395,129
1349			35010	1952	$ (517,289)	21.98	$ (11,368,984)
1350			35010	1953	$ 40,745	21.39	$ 871,545
1351			35010	1954	$ 12,176	21.62	$ 263,260
1352			35010	1955	$ 136,619	20.20	$ 2,759,987
1353			35010	1956	$ 126,603	19.05	$ 2,411,493
1354			35010	1957	$ 106,155	17.39	$ 1,846,168
1355			35010	1959	$ 8,192	15.56	$ 127,498
1356			35010	1960	$ 173,564	15.15	$ 2,629,757
1357			35010	1961	$ 49,748	15.63	$ 777,313
1358			35010	1962	$ 290,116	15.15	$ 4,395,701
1359			35010	1963	$ 128,888	14.44	$ 1,861,198
1360			35010	1964	$ 141,061	13.42	$ 1,893,436
1361			35010	1965	$ 2,271,774	12.58	$ 28,575,772
1362			35010	1966	$ 136,000	10.99	$ 1,494,505
1363			35010	1967	$ 21,436	10.18	$ 218,174
1364			35010	1968	$ 1,365,832	9.64	$ 13,164,648
1365			35010	1969	$ 437	9.59	$ 4,195
1366			35010	1970	$ 63,654	9.85	$ 627,132
1367			35010	1971	$ 2,497,117	9.48	$ 23,669,355
1368			35010	1972	$ 26,988	9.20	$ 248,163
1369			35010	1973	$ 1,401,673	8.10	$ 11,349,581
1370			35010	1974	$ 1,052,961	6.76	$ 7,114,604
1371			35010	1975	$ (6,341)	5.56	$ (35,229)
1372			35010	1976	$ 52,161	4.50	$ 234,961
1373			35010	1977	$ 159,577	3.37	$ 537,297
1374			35010	1978	$ 28,814	2.95	$ 84,935
1375			35010	1979	$ 220,381	2.52	$ 554,765
1376			35010	1980	$ 27,703	2.15	$ 59,481
1377			35010	1981	$ 1,370,591	1.97	$ 2,699,342
1378			35010	1982	$ 227,052	2.22	$ 503,440
1379			35010	1983	$ 1,878,308	2.48	$ 4,666,604
1380			35010	1984	$ (169,630)	2.43	$ (411,972)
1381			35010	1985	$ 468,723	2.98	$ 1,395,009
1382			35010	1986	$ 466,137	3.43	$ 1,597,727
1383			35010	1989	$ 1,066	3.20	$ 3,415
1384			35010	1990	$ 110,965	3.19	$ 353,955
1385			35010	1991	$ 921,441	3.10	$ 2,854,969
1386			35010	1992	$ (62,659)	3.02	$ (189,160)
1387			35010	1995	$ 195,412	2.47	$ 482,498
1388			35010	1999	$ (18,652)	1.84	$ (34,381)
1389			35010	2000	$ 22,000	1.77	$ 38,938
1390			35010	2001	$ 16,184	1.70	$ 27,547
1391			35010	2002	$ (15,602)	1.63	$ (25,369)
1392			35010	2003	$ 83,052	1.56	$ 129,263
1393			35010	2004	$ (7,645)	1.44	$ (11,040)
1394			35010	2006	$ 145,223	1.10	$ 160,025
1395			35010	Total	$ 16,587,135		$ 150,420,358
1396							
1397		Land Rights	35020	1913	$ 2	49.38	$ 99
1398			35020	1914	$ 6	48.78	$ 293
1399			35020	1915	$ 1	49.38	$ 49
1400			35020	1916	$ 11	45.45	$ 480
1401			35020	1917	$ 35	43.48	$ 1,533
1402			35020	1918	$ 1	39.60	$ 40
1403			35020	1922	$ 474	42.11	$ 19,947
1404			35020	1923	$ 1,031	43.01	$ 44,363
1405			35020	1924	$ 2,702	44.94	$ 121,427
1406			35020	1925	$ 183	47.06	$ 8,622
1407			35020	1926	$ 408	49.38	$ 20,165
1408			35020	1927	$ 111	54.05	$ 6,000
1409			35020	1928	$ 397	54.79	$ 21,753
1410			35020	1929	$ 338,594	54.79	$ 18,553,119
1411			35020	1930	$ 2,762	55.56	$ 153,429
1412			35020	1931	$ 12	61.54	$ 738
1413			35020	1932	$ 106,211	74.07	$ 7,867,464
1414			35020	1934	$ 3	80.00	$ 240
1415			35020	1935	$ 1	74.07	$ 74

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
1416			35020	1936	$	2,425	68.97	$	167,274
1417			35020	1939	$	4,516	64.52	$	291,330
1418			35020	1940	$	7,637	63.49	$	484,874
1419			35020	1941	$	1,520	61.54	$	93,511
1420			35020	1942	$	1,030	54.79	$	56,411
1421			35020	1943	$	19,745	50.00	$	987,274
1422			35020	1944	$	246	43.96	$	10,801
1423			35020	1945	$	3,922	40.00	$	156,900
1424			35020	1946	$	1,222	34.48	$	42,124
1425			35020	1947	$	4,295	31.75	$	136,346
1426			35020	1948	$	168	29.41	$	4,932
1427			35020	1949	$	391	28.78	$	11,242
1428			35020	1950	$	8,151	29.20	$	237,980
1429			35020	1951	$	12,487	24.24	$	302,707
1430			35020	1952	$	19,026	21.98	$	418,149
1431			35020	1953	$	60,775	21.39	$	1,300,009
1432			35020	1954	$	7,570	21.62	$	163,666
1433			35020	1955	$	72,802	20.20	$	1,470,756
1434			35020	1956	$	90,733	19.05	$	1,728,248
1435			35020	1957	$	257,786	17.39	$	4,483,230
1436			35020	1958	$	19,416	16.53	$	320,933
1437			35020	1959	$	3,324	15.56	$	51,737
1438			35020	1960	$	31,147	15.15	$	471,925
1439			35020	1961	$	317,817	15.63	$	4,965,883
1440			35020	1962	$	3,441	15.15	$	52,134
1441			35020	1963	$	333,374	14.44	$	4,814,065
1442			35020	1964	$	8,254	13.42	$	110,789
1443			35020	1965	$	181,911	12.58	$	2,288,184
1444			35020	1966	$	349,788	10.99	$	3,843,825
1445			35020	1967	$	4,308	10.18	$	43,849
1446			35020	1968	$	18,836	9.64	$	181,554
1447			35020	1969	$	4	9.59	$	38
1448			35020	1970	$	27,091	9.85	$	266,906
1449			35020	1971	$	1,337,800	9.48	$	12,680,564
1450			35020	1972	$	9,047	9.20	$	83,194
1451			35020	1973	$	18,513	8.10	$	149,903
1452			35020	1974	$	28,783	6.76	$	194,478
1453			35020	1975	$	19,745	5.56	$	109,692
1454			35020	1976	$	2,168,411	4.50	$	9,767,619
1455			35020	1977	$	1,309,538	3.37	$	4,409,220
1456			35020	1978	$	859,243	2.95	$	2,532,773
1457			35020	1979	$	167,746	2.52	$	422,269
1458			35020	1980	$	83,758	2.15	$	179,834
1459			35020	1981	$	22,466	1.97	$	44,246
1460			35020	1982	$	32,652	2.22	$	72,400
1461			35020	1983	$	877,743	2.48	$	2,180,728
1462			35020	1984	$	5,742	2.43	$	13,946
1463			35020	1985	$	701,098	2.98	$	2,086,601
1464			35020	1986	$	78,887	3.43	$	270,394
1465			35020	1987	$	27,743	3.77	$	104,592
1466			35020	1988	$	42,669	3.45	$	147,387
1467			35020	1989	$	17,252	3.20	$	55,250
1468			35020	1990	$	679,270	3.19	$	2,166,730
1469			35020	1991	$	18,717	3.10	$	57,993
1470			35020	1992	$	4,389	3.02	$	13,251
1471			35020	1993	$	15,558	2.87	$	44,609
1472			35020	1994	$	14,169	2.67	$	37,783
1473			35020	1995	$	9,667	2.47	$	23,869
1474			35020	1996	$	717	2.30	$	1,648
1475			35020	1997	$	113,733	2.14	$	243,280
1476			35020	1998	$	314	1.94	$	610
1477			35020	1999	$	167,408	1.84	$	308,587
1478			35020	2000	$	17,141	1.77	$	30,337
1479			35020	2001	$	4,956	1.70	$	8,435
1480			35020	2002	$	34,704	1.63	$	56,429
1481			35020	2003	$	23,823	1.56	$	37,079
1482			35020	Total	$	11,241,504		$	95,315,155
1483									
1484		Structures and Improvements	35200	1935	$	1,895	36.47	$	69,110
1485			35200	1942	$	(26)	25.53	$	(668)
1486			35200	1943	$	43,279	25.53	$	1,104,730

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year		(e) Original Cost	(f) Adjustment Factor		(g) Reproduction Cost
1487			35200	1947	$	370	17.60	$	6,519
1488			35200	1950	$	551	12.76	$	7,032
1489			35200	1953	$	9,267	11.10	$	102,847
1490			35200	1954	$	105,163	11.10	$	1,167,118
1491			35200	1955	$	26,765	10.42	$	278,854
1492			35200	1956	$	45,517	8.80	$	400,640
1493			35200	1957	$	33,510	7.98	$	267,302
1494			35200	1958	$	101,623	7.85	$	798,155
1495			35200	1959	$	40,104	7.74	$	310,208
1496			35200	1960	$	110,667	7.98	$	882,771
1497			35200	1961	$	79,784	8.51	$	678,849
1498			35200	1962	$	92,636	8.51	$	788,205
1499			35200	1963	$	28,187	8.37	$	235,898
1500			35200	1964	$	84,424	8.37	$	706,551
1501			35200	1965	$	64,388	8.23	$	530,174
1502			35200	1966	$	65,908	8.10	$	534,082
1503			35200	1967	$	55,886	7.98	$	445,795
1504			35200	1969	$	54,288	7.09	$	384,929
1505			35200	1970	$	3,731	6.72	$	25,060
1506			35200	1971	$	14,711	6.15	$	90,486
1507			35200	1972	$	57,001	5.74	$	326,962
1508			35200	1974	$	170,821	3.65	$	624,019
1509			35200	1975	$	117,347	3.17	$	371,519
1510			35200	1976	$	248,233	3.36	$	833,727
1511			35200	1977	$	683,488	3.33	$	2,276,873
1512			35200	1978	$	263,254	3.02	$	794,063
1513			35200	1979	$	1,114,676	2.64	$	2,940,871
1514			35200	1980	$	358,172	2.27	$	814,486
1515			35200	1981	$	658,593	2.26	$	1,486,062
1516			35200	1982	$	365,128	2.53	$	925,079
1517			35200	1983	$	649,203	2.55	$	1,655,069
1518			35200	1984	$	651,806	2.30	$	1,497,217
1519			35200	1985	$	484,157	2.16	$	1,046,219
1520			35200	1986	$	1,308,996	2.09	$	2,738,777
1521			35200	1987	$	954,839	2.03	$	1,940,137
1522			35200	1988	$	171,049	1.91	$	326,136
1523			35200	1989	$	311,134	1.83	$	569,825
1524			35200	1990	$	1,148,550	1.84	$	2,109,178
1525			35200	1992	$	63,923	2.05	$	131,058
1526			35200	1993	$	871,533	1.91	$	1,666,407
1527			35200	1994	$	24,593	1.74	$	42,814
1528			35200	1995	$	58,513	1.67	$	97,779
1529			35200	1996	$	28,795	1.60	$	46,083
1530			35200	1997	$	35,733	1.59	$	56,653
1531			35200	1998	$	15,151	1.58	$	23,910
1532			35200	1999	$	39,054	1.54	$	60,098
1533			35200	2000	$	34,391	1.46	$	50,127
1534			35200	2001	$	277,890	1.41	$	392,168
1535			35200	2002	$	31,306	1.41	$	43,997
1536			35200	2003	$	182,312	1.36	$	248,692
1537			35200	2004	$	1,760,551	1.21	$	2,132,355
1538			35200	2005	$	109,735	1.16	$	127,830
1539			35200	2006	$	23,058	1.12	$	25,744
1540			35200	2007	$	98,255	1.00	$	98,255
1541			35200	Total	$	14,433,870		$	38,334,840
1542									
1543		Station Equipment	35300	1925	$	205	19.48	$	3,991
1544			35300	1932	$	1,286	20.87	$	26,836
1545			35300	1935	$	5,969	17.71	$	105,702
1546			35300	1936	$	45,203	17.71	$	800,536
1547			35300	1937	$	3,798	16.23	$	61,664
1548			35300	1938	$	10,309	16.23	$	167,356
1549			35300	1939	$	66,413	16.23	$	1,078,152
1550			35300	1940	$	6,334	16.23	$	102,826
1551			35300	1941	$	5,614	15.80	$	88,675
1552			35300	1942	$	8,787	15.38	$	135,142
1553			35300	1943	$	43,176	15.80	$	681,983
1554			35300	1944	$	41,931	16.70	$	700,150
1555			35300	1945	$	420,800	16.70	$	7,026,456
1556			35300	1946	$	96,512	14.61	$	1,410,100
1557			35300	1947	$	213,965	12.18	$	2,605,134

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
1558			35300	1948	$ 193,165	11.69	$ 2,257,814
1559			35300	1949	$ 149,703	11.03	$ 1,650,762
1560			35300	1950	$ 1,071,224	10.25	$ 10,983,338
1561			35300	1951	$ 1,529,953	9.13	$ 13,970,992
1562			35300	1952	$ 1,283,831	8.85	$ 11,368,235
1563			35300	1953	$ 910,252	8.47	$ 7,709,769
1564			35300	1954	$ 381,731	8.23	$ 3,142,158
1565			35300	1955	$ 1,170,876	8.12	$ 9,504,019
1566			35300	1956	$ 1,310,080	7.49	$ 9,815,950
1567			35300	1957	$ 1,242,903	7.13	$ 8,858,341
1568			35300	1958	$ 513,965	6.80	$ 3,492,723
1569			35300	1959	$ 694,957	6.96	$ 4,835,126
1570			35300	1960	$ 871,833	7.49	$ 6,532,325
1571			35300	1961	$ 701,654	8.35	$ 5,858,062
1572			35300	1962	$ 758,762	8.47	$ 6,426,661
1573			35300	1963	$ 666,764	8.99	$ 5,994,980
1574			35300	1964	$ 141,413	8.47	$ 1,197,756
1575			35300	1965	$ 774,995	8.12	$ 6,290,652
1576			35300	1966	$ 1,553,110	7.79	$ 12,102,355
1577			35300	1967	$ 1,350,778	7.40	$ 9,992,768
1578			35300	1968	$ 616,974	7.13	$ 4,397,258
1579			35300	1969	$ 718,418	6.80	$ 4,882,110
1580			35300	1970	$ 92,830	6.49	$ 602,805
1581			35300	1971	$ 1,649,356	6.35	$ 10,477,448
1582			35300	1972	$ 3,728,000	6.22	$ 23,178,059
1583			35300	1973	$ 2,616,131	5.84	$ 15,289,334
1584			35300	1974	$ 3,182,197	4.68	$ 14,878,051
1585			35300	1975	$ 6,427,378	3.95	$ 25,380,556
1586			35300	1976	$ 5,100,251	3.84	$ 19,609,972
1587			35300	1977	$ 11,232,867	3.56	$ 40,029,097
1588			35300	1978	$ 1,277,229	3.34	$ 4,265,400
1589			35300	1979	$ 15,341,641	3.09	$ 47,439,384
1590			35300	1980	$ 2,456,390	2.85	$ 7,002,812
1591			35300	1981	$ 16,534,628	2.63	$ 43,528,178
1592			35300	1982	$ 19,252,622	2.48	$ 47,676,781
1593			35300	1983	$ 31,491,705	2.47	$ 77,656,329
1594			35300	1984	$ 4,991,054	2.43	$ 12,103,312
1595			35300	1985	$ 15,509,592	2.39	$ 36,996,727
1596			35300	1986	$ 10,231,226	2.37	$ 24,208,048
1597			35300	1987	$ 7,784,539	2.29	$ 17,841,105
1598			35300	1988	$ 2,486,197	2.19	$ 5,436,844
1599			35300	1989	$ 3,833,952	2.07	$ 7,952,649
1600			35300	1990	$ 4,044,135	1.96	$ 7,911,279
1601			35300	1991	$ 5,364,400	1.94	$ 10,424,243
1602			35300	1992	$ 4,690,744	1.89	$ 8,850,330
1603			35300	1993	$ 5,085,933	1.82	$ 9,266,868
1604			35300	1994	$ 8,654,452	1.74	$ 15,019,691
1605			35300	1995	$ 4,426,008	1.67	$ 7,385,214
1606			35300	1996	$ 5,130,482	1.66	$ 8,512,089
1607			35300	1997	$ 10,205,796	1.64	$ 16,695,663
1608			35300	1998	$ 8,373,656	1.59	$ 13,325,464
1609			35300	1999	$ 8,435,741	1.57	$ 13,226,185
1610			35300	2000	$ 1,103,548	1.49	$ 1,638,987
1611			35300	2001	$ 15,936,634	1.42	$ 22,633,712
1612			35300	2002	$ 8,505,424	1.38	$ 11,758,214
1613			35300	2003	$ 13,646,265	1.37	$ 18,732,174
1614			35300	2004	$ 16,859,251	1.27	$ 21,396,251
1615			35300	2005	$ 9,376,992	1.17	$ 11,015,380
1616			35300	2006	$ 11,602,651	1.09	$ 12,615,596
1617			35300	2007	$ 16,321,128	1.00	$ 16,321,128
1618			35300	Total	$ 342,560,662		$ 874,540,211
1619							
1620		Towers and Fixtures	35400	1929	$ 1,717	32.83	$ 56,377
1621			35400	1930	$ 6,345	32.83	$ 208,305
1622			35400	1931	$ 27	32.83	$ 894
1623			35400	1932	$ 3,531	37.88	$ 133,781
1624			35400	1939	$ 50,082	28.97	$ 1,450,848
1625			35400	1940	$ 1,118	28.97	$ 32,387
1626			35400	1942	$ 2,090	25.92	$ 54,180
1627			35400	1943	$ 276	25.92	$ 7,164
1628			35400	1946	$ 47	21.41	$ 1,010

Reproduction Cost New by Vintage Year

Line No. (a)	Plant (a)	FERC Account (b)	FERC Account (c)	Installation Year (d)	Original Cost (e)	Adjustment Factor (f)	Reproduction Cost (g)
1629			35400	1947	$ 258	18.24	$ 4,713
1630			35400	1952	$ 841,197	13.31	$ 11,196,579
1631			35400	1953	$ 127,436	12.31	$ 1,568,999
1632			35400	1954	$ 92,359	12.01	$ 1,109,387
1633			35400	1955	$ 400,669	11.73	$ 4,698,141
1634			35400	1956	$ 527,258	10.94	$ 5,770,320
1635			35400	1957	$ 322,571	10.48	$ 3,380,005
1636			35400	1958	$ 260,501	10.05	$ 2,618,198
1637			35400	1959	$ 617,065	9.66	$ 5,958,684
1638			35400	1960	$ 317,652	9.47	$ 3,008,417
1639			35400	1961	$ 990,281	9.29	$ 9,201,782
1640			35400	1962	$ 192,748	9.12	$ 1,757,869
1641			35400	1963	$ 216,872	8.95	$ 1,941,915
1642			35400	1964	$ 744,100	8.64	$ 6,429,034
1643			35400	1965	$ 1,383,004	8.21	$ 11,351,716
1644			35400	1966	$ 292,434	7.82	$ 2,286,002
1645			35400	1967	$ 2,530,690	7.46	$ 18,883,586
1646			35400	1968	$ 1,872,034	7.14	$ 13,361,466
1647			35400	1969	$ 500,084	6.48	$ 3,240,550
1648			35400	1970	$ 1,334,960	6.08	$ 8,116,574
1649			35400	1971	$ 9,713,077	5.66	$ 54,982,824
1650			35400	1972	$ 429,142	5.30	$ 2,272,520
1651			35400	1973	$ 839,324	4.92	$ 4,133,512
1652			35400	1974	$ 839,790	4.04	$ 3,390,004
1653			35400	1975	$ 840,041	3.52	$ 2,955,029
1654			35400	1976	$ 3,481,206	3.52	$ 12,245,911
1655			35400	1977	$ 3,481,397	3.40	$ 11,824,287
1656			35400	1978	$ 5,265,872	3.10	$ 16,310,324
1657			35400	1979	$ 11,014,695	2.80	$ 30,821,179
1658			35400	1980	$ 281,513	2.51	$ 707,346
1659			35400	1981	$ 5,449,984	2.41	$ 13,156,930
1660			35400	1982	$ 5,028,936	2.37	$ 11,906,998
1661			35400	1983	$ 11,796,173	2.30	$ 27,146,686
1662			35400	1984	$ 923,246	2.17	$ 2,003,000
1663			35400	1985	$ 4,352,974	2.09	$ 9,083,715
1664			35400	1986	$ 139,796	2.03	$ 283,321
1665			35400	1987	$ 162,878	1.96	$ 319,579
1666			35400	1988	$ 241,238	1.89	$ 455,191
1667			35400	1990	$ 8,440,159	1.82	$ 15,352,235
1668			35400	1991	$ 1,403,880	1.86	$ 2,613,929
1669			35400	1992	$ 112,199	1.83	$ 205,604
1670			35400	1997	$ 393,114	1.50	$ 590,698
1671			35400	2001	$ 633	1.32	$ 836
1672			35400	2002	$ 44,978	1.28	$ 57,760
1673			35400	2005	$ 11,662	1.11	$ 12,993
1674			35400	Total	$ 88,317,313		$ 340,661,293
1675							
1676		Poles and Fixtures	35500	1923	$ 1,454	41.23	$ 59,952
1677			35500	1924	$ 36,315	38.29	$ 1,390,403
1678			35500	1925	$ 7,006	38.29	$ 268,235
1679			35500	1926	$ 7,660	38.29	$ 293,270
1680			35500	1927	$ 9,127	41.23	$ 376,345
1681			35500	1928	$ 5,343	41.23	$ 220,296
1682			35500	1929	$ 5,420	41.23	$ 223,486
1683			35500	1930	$ 12,267	38.29	$ 469,661
1684			35500	1931	$ 13,291	38.29	$ 508,890
1685			35500	1932	$ 15,815	41.23	$ 652,119
1686			35500	1933	$ 17,647	44.67	$ 788,279
1687			35500	1934	$ 17,447	41.23	$ 719,382
1688			35500	1935	$ 20,888	41.23	$ 861,287
1689			35500	1936	$ 1,509	38.29	$ 57,769
1690			35500	1937	$ 1,067	35.74	$ 38,126
1691			35500	1938	$ 4,338	35.74	$ 155,003
1692			35500	1939	$ 2,712	35.74	$ 96,911
1693			35500	1940	$ 15,597	33.50	$ 522,524
1694			35500	1941	$ 19,399	31.53	$ 611,681
1695			35500	1942	$ 14,925	29.78	$ 444,455
1696			35500	1943	$ 65,337	28.21	$ 1,843,289
1697			35500	1944	$ 12,291	25.53	$ 313,736
1698			35500	1945	$ 30,571	24.36	$ 744,862
1699			35500	1946	$ 30,747	22.33	$ 686,729

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
1700			35500	1947	$	42,535	18.48	$	786,215
1701			35500	1948	$	251,935	16.75	$	4,220,139
1702			35500	1949	$	172,512	16.75	$	2,889,730
1703			35500	1950	$	228,466	15.77	$	3,601,900
1704			35500	1951	$	105,496	14.49	$	1,528,354
1705			35500	1952	$	50,309	14.11	$	709,664
1706			35500	1953	$	104,790	13.07	$	1,370,013
1707			35500	1954	$	171,979	12.76	$	2,194,898
1708			35500	1955	$	319,491	12.47	$	3,982,711
1709			35500	1956	$	240,655	11.65	$	2,804,306
1710			35500	1957	$	332,747	10.94	$	3,640,044
1711			35500	1958	$	213,235	10.72	$	2,286,002
1712			35500	1959	$	249,947	10.72	$	2,679,581
1713			35500	1960	$	246,437	10.31	$	2,540,335
1714			35500	1961	$	97,924	10.11	$	990,378
1715			35500	1962	$	115,743	9.93	$	1,148,920
1716			35500	1963	$	236,152	9.75	$	2,301,534
1717			35500	1964	$	173,989	9.57	$	1,665,410
1718			35500	1965	$	105,655	9.24	$	976,451
1719			35500	1966	$	307,784	8.93	$	2,749,686
1720			35500	1967	$	30,741	8.51	$	261,559
1721			35500	1968	$	16,829	8.25	$	138,786
1722			35500	1969	$	626,838	7.55	$	4,732,446
1723			35500	1970	$	185,165	6.87	$	1,272,485
1724			35500	1971	$	253,674	6.46	$	1,638,273
1725			35500	1972	$	482,678	6.16	$	2,973,905
1726			35500	1973	$	4,662	5.36	$	24,991
1727			35500	1974	$	174,605	4.25	$	742,805
1728			35500	1975	$	556,013	3.75	$	2,084,192
1729			35500	1976	$	509,034	3.75	$	1,908,093
1730			35500	1977	$	1,055,331	3.60	$	3,796,568
1731			35500	1978	$	1,031,728	3.39	$	3,500,230
1732			35500	1979	$	1,422,287	3.08	$	4,381,539
1733			35500	1980	$	1,104,066	2.82	$	3,114,800
1734			35500	1981	$	590,913	2.55	$	1,508,318
1735			35500	1982	$	1,879,056	2.40	$	4,516,725
1736			35500	1983	$	821,963	2.35	$	1,932,440
1737			35500	1984	$	1,180,694	2.29	$	2,704,644
1738			35500	1985	$	2,296,853	2.26	$	5,194,856
1739			35500	1986	$	3,022,219	2.21	$	6,666,660
1740			35500	1987	$	1,067,989	2.17	$	2,317,707
1741			35500	1988	$	1,724,629	2.01	$	3,468,863
1742			35500	1989	$	1,012,093	1.87	$	1,895,238
1743			35500	1990	$	1,164,328	1.80	$	2,094,342
1744			35500	1991	$	3,598,241	1.69	$	6,065,294
1745			35500	1992	$	2,782,380	1.60	$	4,458,707
1746			35500	1993	$	2,810,563	1.57	$	4,401,884
1747			35500	1994	$	1,413,839	1.48	$	2,086,330
1748			35500	1995	$	2,509,622	1.43	$	3,580,123
1749			35500	1996	$	1,728,433	1.37	$	2,361,991
1750			35500	1997	$	1,819,492	1.32	$	2,400,741
1751			35500	1998	$	3,717,544	1.31	$	4,857,314
1752			35500	1999	$	2,295,702	1.33	$	3,053,509
1753			35500	2000	$	9,004,924	1.32	$	11,867,006
1754			35500	2001	$	14,279,932	1.26	$	18,031,718
1755			35500	2002	$	5,197,465	1.23	$	6,382,576
1756			35500	2003	$	4,086,855	1.20	$	4,914,582
1757			35500	2004	$	2,026,313	1.16	$	2,357,381
1758			35500	2005	$	1,263,392	1.09	$	1,379,258
1759			35500	2006	$	2,179,272	1.04	$	2,270,464
1760			35500	2007	$	5,922,444	1.00	$	5,922,444
1761			35500	Total	$	92,986,755		$	206,674,745
1762									
1763		Overhead Conductors, Device	35600	1924	$	12,400	29.38	$	364,252
1764			35600	1925	$	23,196	28.20	$	654,157
1765			35600	1926	$	7,881	29.38	$	231,514
1766			35600	1927	$	17,582	30.65	$	538,938
1767			35600	1928	$	16,900	28.20	$	476,611
1768			35600	1930	$	10,413	30.65	$	319,190
1769			35600	1931	$	4,577	32.05	$	146,666
1770			35600	1932	$	15,464	35.25	$	545,130

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
1771			35600	1933	$	20,300	33.57	$	681,526
1772			35600	1934	$	19,624	30.65	$	601,552
1773			35600	1935	$	30,411	30.65	$	932,188
1774			35600	1936	$	40,475	30.65	$	1,240,689
1775			35600	1937	$	17,831	28.20	$	502,858
1776			35600	1938	$	5,082	29.38	$	149,292
1777			35600	1939	$	26,230	29.38	$	770,536
1778			35600	1940	$	27,946	29.38	$	820,942
1779			35600	1941	$	28,278	28.20	$	797,476
1780			35600	1942	$	8,876	27.12	$	240,697
1781			35600	1943	$	2,991	27.12	$	81,110
1782			35600	1944	$	53,904	27.12	$	1,461,673
1783			35600	1945	$	14,405	26.11	$	376,147
1784			35600	1946	$	4,678	22.03	$	103,057
1785			35600	1947	$	14,862	19.05	$	283,187
1786			35600	1948	$	4,364	17.63	$	76,917
1787			35600	1949	$	20,015	17.63	$	352,781
1788			35600	1950	$	205,025	16.79	$	3,441,624
1789			35600	1951	$	109,948	15.33	$	1,685,139
1790			35600	1952	$	456,756	14.39	$	6,571,945
1791			35600	1953	$	224,964	13.56	$	3,050,104
1792			35600	1954	$	6,133	13.30	$	81,579
1793			35600	1955	$	330,808	12.37	$	4,091,723
1794			35600	1956	$	6,059	11.37	$	68,898
1795			35600	1957	$	301,891	10.85	$	3,274,485
1796			35600	1958	$	8,738	11.02	$	96,256
1797			35600	1959	$	118,678	11.37	$	1,349,539
1798			35600	1960	$	484,782	11.19	$	5,425,144
1799			35600	1961	$	381,300	11.19	$	4,267,090
1800			35600	1962	$	610,526	10.85	$	6,622,110
1801			35600	1963	$	736,839	11.75	$	8,658,187
1802			35600	1964	$	640,396	11.02	$	7,054,628
1803			35600	1965	$	250,641	10.68	$	2,677,405
1804			35600	1966	$	436,469	10.22	$	4,459,741
1805			35600	1967	$	524,314	9.93	$	5,206,419
1806			35600	1968	$	1,159,154	9.79	$	11,350,482
1807			35600	1969	$	852,108	8.70	$	7,416,776
1808			35600	1970	$	939,473	7.75	$	7,278,611
1809			35600	1971	$	3,054,864	7.05	$	21,537,611
1810			35600	1972	$	939,525	7.12	$	6,690,812
1811			35600	1973	$	194,054	7.05	$	1,368,134
1812			35600	1974	$	3,603,759	5.97	$	21,531,754
1813			35600	1975	$	3,776,543	4.83	$	18,236,743
1814			35600	1976	$	3,575,050	4.22	$	15,092,855
1815			35600	1977	$	9,249,098	3.92	$	36,227,017
1816			35600	1978	$	4,339,170	4.10	$	17,786,230
1817			35600	1979	$	8,566,059	3.83	$	32,822,297
1818			35600	1980	$	3,695,244	3.41	$	12,585,734
1819			35600	1981	$	5,087,411	3.04	$	15,460,180
1820			35600	1982	$	4,177,250	2.72	$	11,370,941
1821			35600	1983	$	6,547,267	2.53	$	16,544,802
1822			35600	1984	$	3,421,306	2.63	$	9,000,422
1823			35600	1985	$	3,383,306	2.64	$	8,933,791
1824			35600	1986	$	2,383,258	2.61	$	6,223,190
1825			35600	1987	$	1,015,654	2.72	$	2,764,725
1826			35600	1988	$	1,548,944	2.05	$	3,176,864
1827			35600	1989	$	901,037	1.99	$	1,797,044
1828			35600	1990	$	3,564,430	1.98	$	7,064,003
1829			35600	1991	$	3,017,807	1.93	$	5,813,212
1830			35600	1992	$	2,456,000	2.05	$	5,029,909
1831			35600	1993	$	1,198,684	1.98	$	2,378,902
1832			35600	1994	$	954,686	1.91	$	1,819,134
1833			35600	1995	$	392,402	1.75	$	685,636
1834			35600	1996	$	944,773	1.72	$	1,623,621
1835			35600	1997	$	1,300,857	1.70	$	2,209,974
1836			35600	1998	$	1,379,243	1.65	$	2,271,972
1837			35600	1999	$	1,352,259	1.79	$	2,425,901
1838			35600	2000	$	2,891,182	1.66	$	4,813,132
1839			35600	2001	$	7,486,184	1.58	$	11,827,365
1840			35600	2002	$	1,646,346	1.58	$	2,605,428
1841			35600	2003	$	1,413,910	1.57	$	2,217,674

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
1842			35600	2004	$ 2,496,155	1.45	$ 3,628,571
1843			35600	2005	$ 705,130	1.28	$ 903,883
1844			35600	2006	$ 568,165	1.10	$ 623,700
1845			35600	2007	$ 346,919	1.00	$ 346,919
1846			35600	Total	$ 112,807,617		$ 424,317,049
1847							
1848		Underground Conduit	35700	1932	$ 3,517	31.93	$ 112,305
1849			35700	1933	$ 8,988	31.93	$ 286,966
1850			35700	1938	$ 410	26.61	$ 10,915
1851			35700	1943	$ 1,787	23.95	$ 42,792
1852			35700	1946	$ 673	19.96	$ 13,432
1853			35700	1947	$ 1,691	17.74	$ 29,999
1854			35700	1948	$ 6,425	15.45	$ 99,261
1855			35700	1952	$ 2,529	12.60	$ 31,872
1856			35700	1953	$ 12,966	11.68	$ 151,462
1857			35700	1956	$ 1,569	10.41	$ 16,336
1858			35700	1962	$ 2,807	8.71	$ 24,443
1859			35700	1968	$ 22,095	7.04	$ 155,617
1860			35700	1969	$ 68	6.56	$ 446
1861			35700	1978	$ 2,085	3.13	$ 6,526
1862			35700	1979	$ 13,343	2.89	$ 38,496
1863			35700	1981	$ 7,772	2.47	$ 19,186
1864			35700	1982	$ 785	2.28	$ 1,790
1865			35700	1983	$ 24,459	2.21	$ 53,982
1866			35700	1984	$ 34,529	2.15	$ 74,157
1867			35700	1985	$ 1,715	2.11	$ 3,618
1868			35700	1986	$ 334	2.07	$ 693
1869			35700	2001	$ 1,016	1.38	$ 1,399
1870			35700	2002	$ 146	1.31	$ 190
1871			35700	2003	$ 170	1.26	$ 215
1872			35700	2004	$ 92,496	1.17	$ 108,576
1873			35700	2007	$ 138,796	1.00	$ 138,796
1874			35700	Total	$ 383,171		$ 1,423,469
1875							
1876		Undergrnd Conductors Device	35800	1974	$ 38,932	4.84	$ 188,515
1877			35800	1981	$ 75,377	2.76	$ 207,904
1878			35800	1982	$ 166,502	2.61	$ 435,365
1879			35800	1983	$ 39,033	2.58	$ 100,851
1880			35800	1984	$ 70,093	2.63	$ 184,013
1881			35800	1985	$ 11,986	2.70	$ 32,377
1882			35800	1986	$ 31,400	2.45	$ 76,877
1883			35800	1987	$ 8,366	2.41	$ 20,179
1884			35800	1988	$ 5,951	2.30	$ 13,685
1885			35800	1990	$ 2,577	1.82	$ 4,683
1886			35800	1992	$ 3,388	1.59	$ 5,376
1887			35800	1998	$ 4,657	1.47	$ 6,844
1888			35800	1999	$ 69,984	1.44	$ 100,989
1889			35800	2003	$ 4,055	1.39	$ 5,646
1890			35800	2004	$ 83,431	1.28	$ 106,521
1891			35800	2005	$ 15,805	1.18	$ 18,674
1892			35800	2007	$ 157,859	1.00	$ 157,859
1893			35800	Total	$ 789,396		$ 1,666,359
1894							
1895		Roads and Trails	35900	1942	$ 7,435	38.39	$ 285,426
1896			35900	1946	$ 268	28.79	$ 7,707
1897			35900	1949	$ 1,092	20.03	$ 21,873
1898			35900	1955	$ 8,190	14.40	$ 117,914
1899			35900	1956	$ 771	13.55	$ 10,447
1900			35900	1958	$ 243	12.12	$ 2,947
1901			35900	1959	$ 525	11.52	$ 6,047
1902			35900	1976	$ 36,660	3.75	$ 137,591
1903			35900	1985	$ 14,843	2.09	$ 31,012
1904			35900	Total	$ 70,027		$ 620,965
1905							
1906		Land	36010	1913	$ 101,421	49.38	$ 5,008,453
1907			36010	1923	$ 2,104	43.01	$ 90,480
1908			36010	1928	$ 36,497	54.79	$ 1,999,833
1909			36010	1929	$ 20,431	54.79	$ 1,119,529
1910			36010	1931	$ 3,138	61.54	$ 193,110
1911			36010	1932	$ 92,479	74.07	$ 6,850,303
1912			36010	1933	$ 1,742	83.33	$ 145,125

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
1913			36010	1936	$	4,911	68.97	$	338,683
1914			36010	1937	$	4	65.57	$	289
1915			36010	1938	$	22,113	63.49	$	1,403,970
1916			36010	1939	$	2,236	64.52	$	144,229
1917			36010	1940	$	883	63.49	$	56,048
1918			36010	1941	$	8,841	61.54	$	544,055
1919			36010	1942	$	2,545	54.79	$	139,462
1920			36010	1943	$	67,239	50.00	$	3,361,972
1921			36010	1944	$	2,306	43.96	$	101,384
1922			36010	1946	$	2	34.48	$	85
1923			36010	1947	$	4,095	31.75	$	129,987
1924			36010	1948	$	9,496	29.41	$	279,296
1925			36010	1949	$	58,672	28.78	$	1,688,406
1926			36010	1950	$	15,285	29.20	$	446,275
1927			36010	1951	$	7,548	24.24	$	182,978
1928			36010	1952	$	21,977	21.98	$	483,013
1929			36010	1953	$	23,043	21.39	$	492,902
1930			36010	1954	$	39,388	21.62	$	851,636
1931			36010	1955	$	13,009	20.20	$	262,810
1932			36010	1956	$	2,151	19.05	$	40,966
1933			36010	1957	$	29,868	17.39	$	519,451
1934			36010	1958	$	26,611	16.53	$	439,852
1935			36010	1959	$	14,912	15.56	$	232,094
1936			36010	1960	$	9,781	15.15	$	148,196
1937			36010	1961	$	5,293	15.63	$	82,709
1938			36010	1962	$	70,741	15.15	$	1,071,837
1939			36010	1963	$	8,869	14.44	$	128,076
1940			36010	1964	$	14,098	13.42	$	189,233
1941			36010	1965	$	44,864	12.58	$	564,321
1942			36010	1966	$	72,408	10.99	$	795,692
1943			36010	1967	$	11,610	10.18	$	118,167
1944			36010	1968	$	20,534	9.64	$	197,917
1945			36010	1969	$	30,888	9.59	$	296,288
1946			36010	1970	$	20,095	9.85	$	197,982
1947			36010	1971	$	18,960	9.48	$	179,713
1948			36010	1972	$	32,723	9.20	$	300,897
1949			36010	1973	$	3,842	8.10	$	31,106
1950			36010	1974	$	32,964	6.76	$	222,727
1951			36010	1975	$	83,301	5.56	$	462,781
1952			36010	1976	$	34,836	4.50	$	156,920
1953			36010	1977	$	33,360	3.37	$	112,323
1954			36010	1978	$	33,987	2.95	$	100,182
1955			36010	1979	$	44,597	2.52	$	112,264
1956			36010	1980	$	58,766	2.15	$	126,175
1957			36010	1981	$	59,889	1.97	$	117,950
1958			36010	1982	$	20,374	2.22	$	45,176
1959			36010	1983	$	88,499	2.48	$	219,874
1960			36010	1984	$	69,300	2.43	$	168,307
1961			36010	1985	$	54,658	2.98	$	162,673
1962			36010	1986	$	23,941	3.43	$	82,061
1963			36010	1988	$	32,358	3.45	$	111,771
1964			36010	1990	$	63,411	3.19	$	202,267
1965			36010	1991	$	10,333	3.10	$	32,015
1966			36010	1992	$	159,812	3.02	$	482,452
1967			36010	1993	$	39,999	2.87	$	114,691
1968			36010	1994	$	29,106	2.67	$	77,615
1969			36010	1996	$	641	2.30	$	1,474
1970			36010	1997	$	45,783	2.14	$	97,931
1971			36010	1998	$	47,140	1.94	$	91,534
1972			36010	1999	$	23,152	1.84	$	42,677
1973			36010	2000	$	109,991	1.77	$	194,674
1974			36010	2001	$	11,875	1.70	$	20,213
1975			36010	2002	$	11,102	1.63	$	18,052
1976			36010	2005	$	37,243	1.27	$	47,444
1977			36010	2007	$	201,983	1.00	$	201,983
1978			36010	Total	$	2,462,053		$	35,675,013
1979									
1980		Land Rights	36020	1905	$	1	60.83	$	61
1981			36020	1913	$	3	49.38	$	148
1982			36020	1914	$	6	48.78	$	293
1983			36020	1915	$	3	49.38	$	148

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
1984			36020	1916	$	2	45.45	$	91
1985			36020	1917	$	2	43.48	$	87
1986			36020	1918	$	5	39.60	$	198
1987			36020	1919	$	4	37.74	$	151
1988			36020	1920	$	4	31.75	$	127
1989			36020	1921	$	4	34.19	$	137
1990			36020	1922	$	89	42.11	$	3,766
1991			36020	1923	$	2	43.01	$	86
1992			36020	1924	$	4	44.94	$	180
1993			36020	1925	$	16	47.06	$	753
1994			36020	1926	$	121	49.38	$	5,985
1995			36020	1927	$	39	54.05	$	2,108
1996			36020	1928	$	133	54.79	$	7,288
1997			36020	1929	$	218	54.79	$	11,945
1998			36020	1930	$	100	55.56	$	5,556
1999			36020	1931	$	110	61.54	$	6,769
2000			36020	1932	$	291	74.07	$	21,556
2001			36020	1933	$	12	83.33	$	1,000
2002			36020	1934	$	22	80.00	$	1,760
2003			36020	1935	$	205	74.07	$	15,148
2004			36020	1936	$	2,911	68.97	$	200,779
2005			36020	1937	$	4,084	65.57	$	267,814
2006			36020	1938	$	243	63.49	$	15,420
2007			36020	1939	$	960	64.52	$	61,960
2008			36020	1940	$	866	63.49	$	54,982
2009			36020	1941	$	3,055	61.54	$	187,994
2010			36020	1942	$	1,483	54.79	$	81,248
2011			36020	1943	$	305	50.00	$	15,241
2012			36020	1944	$	191	43.96	$	8,395
2013			36020	1945	$	180	40.00	$	7,186
2014			36020	1946	$	617	34.48	$	21,264
2015			36020	1947	$	1,343	31.75	$	42,636
2016			36020	1948	$	296	29.41	$	8,692
2017			36020	1949	$	231	28.78	$	6,635
2018			36020	1950	$	1,982	29.20	$	57,879
2019			36020	1951	$	524	24.24	$	12,704
2020			36020	1952	$	976	21.98	$	21,455
2021			36020	1953	$	54,471	21.39	$	1,165,162
2022			36020	1954	$	571	21.62	$	12,352
2023			36020	1955	$	790	20.20	$	15,958
2024			36020	1956	$	1,326	19.05	$	25,256
2025			36020	1957	$	8,312	17.39	$	144,550
2026			36020	1958	$	3,801	16.53	$	62,825
2027			36020	1959	$	1,067	15.56	$	16,603
2028			36020	1960	$	2,121	15.15	$	32,140
2029			36020	1961	$	1,798	15.63	$	28,089
2030			36020	1962	$	1,387	15.15	$	21,017
2031			36020	1963	$	4,118	14.44	$	59,462
2032			36020	1964	$	1,490	13.42	$	19,998
2033			36020	1965	$	1,105	12.58	$	13,897
2034			36020	1966	$	10,147	10.99	$	111,510
2035			36020	1967	$	6,054	10.18	$	61,616
2036			36020	1968	$	896	9.64	$	8,637
2037			36020	1969	$	762	9.59	$	7,313
2038			36020	1970	$	203	9.85	$	2,001
2039			36020	1971	$	6,089	9.48	$	57,718
2040			36020	1972	$	188,563	9.20	$	1,733,909
2041			36020	1973	$	1,675	8.10	$	13,566
2042			36020	1974	$	1,843	6.76	$	12,453
2043			36020	1975	$	2,400	5.56	$	13,331
2044			36020	1976	$	1,361	4.50	$	6,130
2045			36020	1977	$	7,926	3.37	$	26,687
2046			36020	1978	$	1,283	2.95	$	3,782
2047			36020	1979	$	8,018	2.52	$	20,184
2048			36020	1980	$	708	2.15	$	1,519
2049			36020	1981	$	1,943	1.97	$	3,827
2050			36020	1982	$	36,941	2.22	$	81,908
2051			36020	1983	$	1,978	2.48	$	4,913
2052			36020	1984	$	15,285	2.43	$	37,122
2053			36020	1985	$	8,020	2.98	$	23,870
2054			36020	1986	$	4,193	3.43	$	14,372

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year		(e) Original Cost	(f) Adjustment Factor		(g) Reproduction Cost
2055			36020	1987	$	2,798	3.77	$	10,547
2056			36020	1988	$	447	3.45	$	1,544
2057			36020	1989	$	1,234	3.20	$	3,953
2058			36020	1990	$	5,609	3.19	$	17,892
2059			36020	1991	$	6,139	3.10	$	19,021
2060			36020	1992	$	11,963	3.02	$	36,115
2061			36020	1993	$	837	2.87	$	2,401
2062			36020	1994	$	12,178	2.67	$	32,476
2063			36020	1995	$	43,283	2.47	$	106,871
2064			36020	1996	$	26,493	2.30	$	60,904
2065			36020	1997	$	27,012	2.14	$	57,779
2066			36020	1998	$	589	1.94	$	1,143
2067			36020	1999	$	1,812	1.84	$	3,339
2068			36020	2000	$	410	1.77	$	726
2069			36020	2005	$	2,139	1.27	$	2,725
2070			36020	Total	$	553,230		$	5,378,740
2071									
2072		Structures and Improvements	36100	1905	$	7,963	63.81	$	508,170
2073			36100	1923	$	4,183	26.87	$	112,388
2074			36100	1928	$	1,157	34.03	$	39,378
2075			36100	1929	$	197,892	31.91	$	6,314,166
2076			36100	1930	$	708	36.47	$	25,817
2077			36100	1931	$	605	39.27	$	23,741
2078			36100	1934	$	168	36.47	$	6,126
2079			36100	1935	$	1,098	36.47	$	40,039
2080			36100	1936	$	2,982	34.03	$	101,490
2081			36100	1937	$	582	31.91	$	18,570
2082			36100	1938	$	412	34.03	$	14,022
2083			36100	1939	$	536	34.03	$	18,242
2084			36100	1940	$	2,075	34.03	$	70,621
2085			36100	1941	$	53,903	28.36	$	1,528,795
2086			36100	1942	$	2,157	25.53	$	55,059
2087			36100	1943	$	1,731	25.53	$	44,180
2088			36100	1944	$	2,733	25.53	$	69,754
2089			36100	1945	$	1,546	25.53	$	39,463
2090			36100	1946	$	26,394	21.27	$	561,439
2091			36100	1947	$	25,496	17.60	$	448,824
2092			36100	1948	$	2,482	14.18	$	35,204
2093			36100	1949	$	9,001	13.43	$	120,930
2094			36100	1950	$	7,033	12.76	$	89,764
2095			36100	1951	$	411,529	12.45	$	5,124,191
2096			36100	1952	$	85,426	12.16	$	1,038,365
2097			36100	1953	$	59,254	11.10	$	657,609
2098			36100	1954	$	67,635	11.10	$	750,619
2099			36100	1955	$	169,843	10.42	$	1,769,538
2100			36100	1956	$	130,652	8.80	$	1,149,992
2101			36100	1957	$	93,016	7.98	$	741,973
2102			36100	1958	$	447,896	7.85	$	3,517,807
2103			36100	1959	$	71,827	7.74	$	555,588
2104			36100	1960	$	69,914	7.98	$	557,686
2105			36100	1961	$	83,205	8.51	$	707,954
2106			36100	1962	$	129,863	8.51	$	1,104,950
2107			36100	1963	$	191,667	8.37	$	1,604,080
2108			36100	1964	$	159,917	8.37	$	1,338,365
2109			36100	1965	$	163,021	8.23	$	1,342,336
2110			36100	1966	$	(144,086)	8.10	$	(1,167,584)
2111			36100	1967	$	6,336	7.98	$	50,541
2112			36100	1968	$	275,623	7.51	$	2,069,259
2113			36100	1969	$	126,417	7.09	$	896,357
2114			36100	1970	$	63,206	6.72	$	424,573
2115			36100	1971	$	149,591	6.15	$	920,102
2116			36100	1972	$	112,007	5.74	$	642,488
2117			36100	1973	$	72,622	5.11	$	370,745
2118			36100	1974	$	222,616	3.65	$	813,230
2119			36100	1975	$	424,748	3.17	$	1,344,746
2120			36100	1976	$	359,309	3.36	$	1,206,794
2121			36100	1977	$	112,397	3.33	$	374,425
2122			36100	1978	$	120,097	3.02	$	362,252
2123			36100	1979	$	624,488	2.64	$	1,647,598
2124			36100	1980	$	258,995	2.27	$	588,957
2125			36100	1981	$	218,079	2.26	$	492,078

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
2126			36100	1982	$	511,260	2.53	$	1,295,314
2127			36100	1983	$	646,489	2.55	$	1,648,151
2128			36100	1984	$	586,712	2.30	$	1,347,696
2129			36100	1985	$	737,318	2.16	$	1,593,278
2130			36100	1986	$	478,646	2.09	$	1,001,458
2131			36100	1987	$	684,767	2.03	$	1,391,377
2132			36100	1988	$	453,121	1.91	$	863,959
2133			36100	1989	$	25,749	1.83	$	47,157
2134			36100	1990	$	274,532	1.84	$	504,146
2135			36100	1991	$	107,332	2.03	$	218,087
2136			36100	1992	$	4,405	2.05	$	9,032
2137			36100	1993	$	223,325	1.91	$	427,006
2138			36100	1994	$	183,137	1.74	$	318,821
2139			36100	1995	$	177,743	1.67	$	297,022
2140			36100	1996	$	13,809	1.60	$	22,100
2141			36100	1997	$	39,900	1.59	$	63,259
2142			36100	1998	$	107,922	1.58	$	170,311
2143			36100	1999	$	14,607	1.54	$	22,479
2144			36100	2000	$	37,211	1.46	$	54,238
2145			36100	2001	$	10,981	1.41	$	15,497
2146			36100	2002	$	180,516	1.41	$	253,699
2147			36100	2003	$	18,835	1.36	$	25,692
2148			36100	2004	$	1,868	1.21	$	2,262
2149			36100	2005	$	20,191	1.16	$	23,521
2150			36100	2006	$	300,444	1.12	$	335,442
2151			36100	2007	$	176,785	1.00	$	176,785
2152			36100	Total	$	11,707,553		$	55,411,586
2153									
2154		Station Equipment	36200	1913	$	307	30.82	$	9,465
2155			36200	1914	$	1,674	30.82	$	51,598
2156			36200	1917	$	460	25.22	$	11,603
2157			36200	1918	$	169	21.34	$	3,613
2158			36200	1922	$	3,575	19.13	$	68,381
2159			36200	1923	$	1,243	18.49	$	22,987
2160			36200	1924	$	2,237	17.34	$	38,786
2161			36200	1925	$	137	17.34	$	2,367
2162			36200	1926	$	244	18.49	$	4,507
2163			36200	1927	$	124,073	18.49	$	2,294,327
2164			36200	1929	$	24,570	17.90	$	439,685
2165			36200	1930	$	120,027	17.90	$	2,147,914
2166			36200	1931	$	334	17.34	$	5,796
2167			36200	1932	$	664,825	18.49	$	12,293,757
2168			36200	1934	$	281	17.34	$	4,872
2169			36200	1935	$	4,434	16.81	$	74,545
2170			36200	1936	$	44,168	16.81	$	742,487
2171			36200	1937	$	7,881	15.85	$	124,920
2172			36200	1938	$	4,045	15.41	$	62,329
2173			36200	1939	$	13,756	15.41	$	211,974
2174			36200	1940	$	21,779	15.41	$	335,608
2175			36200	1941	$	360,896	14.99	$	5,411,019
2176			36200	1942	$	69,218	14.99	$	1,037,803
2177			36200	1943	$	106,061	14.99	$	1,590,205
2178			36200	1944	$	14,365	15.85	$	227,693
2179			36200	1945	$	20,987	15.41	$	323,400
2180			36200	1946	$	79,575	13.87	$	1,103,606
2181			36200	1947	$	109,056	12.33	$	1,344,422
2182			36200	1948	$	252,348	11.80	$	2,978,515
2183			36200	1949	$	231,287	11.32	$	2,618,511
2184			36200	1950	$	660,976	10.67	$	7,051,486
2185			36200	1951	$	1,845,367	9.73	$	17,960,000
2186			36200	1952	$	824,592	9.40	$	7,753,282
2187			36200	1953	$	885,728	8.95	$	7,925,145
2188			36200	1954	$	963,964	8.67	$	8,355,629
2189			36200	1955	$	557,766	8.41	$	4,688,207
2190			36200	1956	$	186,939	7.70	$	1,440,340
2191			36200	1957	$	819,099	7.30	$	5,978,902
2192			36200	1958	$	914,418	7.11	$	6,503,518
2193			36200	1959	$	655,581	7.02	$	4,603,599
2194			36200	1960	$	1,048,150	7.20	$	7,551,463
2195			36200	1961	$	2,380,621	7.81	$	18,600,746
2196			36200	1962	$	3,362,197	7.70	$	25,905,325

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
2197			36200	1963	$	2,047,009	7.93	$	16,222,591
2198			36200	1964	$	1,356,854	7.70	$	10,454,395
2199			36200	1965	$	3,159,413	7.60	$	24,009,438
2200			36200	1966	$	633,560	7.40	$	4,686,242
2201			36200	1967	$	839,370	7.11	$	5,969,765
2202			36200	1968	$	1,426,975	6.85	$	9,773,039
2203			36200	1969	$	1,991,559	6.38	$	12,699,084
2204			36200	1970	$	3,205,352	6.10	$	19,540,369
2205			36200	1971	$	8,273,437	6.03	$	49,888,056
2206			36200	1972	$	2,729,339	5.90	$	16,107,500
2207			36200	1973	$	3,381,104	5.55	$	18,756,724
2208			36200	1974	$	4,386,218	4.55	$	19,944,758
2209			36200	1975	$	8,289,037	3.93	$	32,612,447
2210			36200	1976	$	4,097,342	3.83	$	15,675,908
2211			36200	1977	$	5,021,177	3.47	$	17,409,407
2212			36200	1978	$	3,993,584	3.24	$	12,955,828
2213			36200	1979	$	3,670,575	3.06	$	11,250,038
2214			36200	1980	$	3,485,720	2.84	$	9,916,453
2215			36200	1981	$	2,613,622	2.60	$	6,807,092
2216			36200	1982	$	7,095,000	2.37	$	16,820,349
2217			36200	1983	$	8,795,940	2.35	$	20,676,103
2218			36200	1984	$	9,352,716	2.36	$	22,078,437
2219			36200	1985	$	10,161,772	2.32	$	23,586,851
2220			36200	1986	$	5,176,210	2.29	$	11,865,742
2221			36200	1987	$	4,156,481	2.22	$	9,223,254
2222			36200	1988	$	2,858,307	2.02	$	5,776,503
2223			36200	1989	$	1,219,690	1.86	$	2,262,959
2224			36200	1990	$	2,354,269	1.73	$	4,078,171
2225			36200	1991	$	2,564,264	1.72	$	4,421,225
2226			36200	1992	$	2,096,756	1.72	$	3,612,356
2227			36200	1993	$	4,104,479	1.71	$	7,000,662
2228			36200	1994	$	5,483,517	1.65	$	9,046,808
2229			36200	1995	$	2,782,290	1.56	$	4,353,962
2230			36200	1996	$	6,013,822	1.57	$	9,464,330
2231			36200	1997	$	2,959,337	1.55	$	4,576,158
2232			36200	1998	$	3,326,498	1.49	$	4,944,085
2233			36200	1999	$	4,683,829	1.47	$	6,901,357
2234			36200	2000	$	836,536	1.46	$	1,220,433
2235			36200	2001	$	2,451,915	1.44	$	3,521,562
2236			36200	2002	$	7,987,476	1.44	$	11,501,787
2237			36200	2003	$	3,197,671	1.43	$	4,577,839
2238			36200	2004	$	5,843,954	1.28	$	7,495,819
2239			36200	2005	$	5,017,433	1.18	$	5,931,653
2240			36200	2006	$	7,260,998	1.09	$	7,917,541
2241			36200	2007	$	5,292,191	1.00	$	5,292,191
2242			36200	Total	$	205,064,007		$	692,731,605
2243									
2244		Customers Transformer Station	36410	1924	$	80	35.72	$	2,852
2245			36410	1928	$	26,332	38.47	$	1,012,946
2246			36410	1929	$	14,745	35.72	$	526,689
2247			36410	1930	$	55	35.72	$	1,960
2248			36410	1931	$	6,621	38.47	$	254,705
2249			36410	1932	$	791	41.67	$	32,950
2250			36410	1934	$	789	38.47	$	30,363
2251			36410	1935	$	3,103	38.47	$	119,384
2252			36410	1936	$	3,567	35.72	$	127,417
2253			36410	1937	$	4,018	33.34	$	133,959
2254			36410	1938	$	13,464	31.26	$	420,826
2255			36410	1939	$	603	31.26	$	18,835
2256			36410	1940	$	2,906	31.26	$	90,824
2257			36410	1941	$	2,192	27.78	$	60,913
2258			36410	1942	$	1,026	27.78	$	28,519
2259			36410	1943	$	13,179	26.32	$	346,894
2260			36410	1944	$	625	23.81	$	14,880
2261			36410	1945	$	4,373	21.74	$	95,083
2262			36410	1946	$	3,561	20.84	$	74,192
2263			36410	1947	$	2,518	17.24	$	43,419
2264			36410	1948	$	18,208	15.63	$	284,548
2265			36410	1949	$	4,298	15.63	$	67,161
2266			36410	1950	$	55,950	14.71	$	822,953
2267			36410	1951	$	47,596	13.89	$	661,184

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
2268			36410	1952	$	17,190	13.16	$	226,224
2269			36410	1953	$	(368,568)	12.50	$	(4,607,972)
2270			36410	1954	$	55,146	12.20	$	672,642
2271			36410	1955	$	80,996	11.91	$	964,422
2272			36410	1956	$	3,727	11.11	$	41,414
2273			36410	1957	$	49,732	10.42	$	518,145
2274			36410	1958	$	156,740	10.21	$	1,599,695
2275			36410	1959	$	41,564	10.21	$	424,205
2276			36410	1960	$	160,236	9.81	$	1,571,242
2277			36410	1961	$	100,781	9.62	$	969,228
2278			36410	1962	$	129,834	9.44	$	1,225,078
2279			36410	1963	$	76,088	9.26	$	704,654
2280			36410	1964	$	129,204	9.09	$	1,174,808
2281			36410	1965	$	133,872	8.77	$	1,174,539
2282			36410	1966	$	244,902	8.48	$	2,075,833
2283			36410	1967	$	209,772	8.20	$	1,719,770
2284			36410	1968	$	297,661	7.81	$	2,325,916
2285			36410	1969	$	165,277	7.14	$	1,180,772
2286			36410	1970	$	136,008	6.41	$	872,012
2287			36410	1971	$	163,352	5.95	$	972,520
2288			36410	1972	$	403,798	5.62	$	2,268,959
2289			36410	1973	$	297,922	5.00	$	1,489,893
2290			36410	1974	$	375,569	4.03	$	1,514,680
2291			36410	1975	$	347,770	3.52	$	1,224,775
2292			36410	1976	$	317,592	3.52	$	1,118,494
2293			36410	1977	$	509,143	3.33	$	1,697,464
2294			36410	1978	$	296,736	3.11	$	921,716
2295			36410	1979	$	389,720	2.76	$	1,076,778
2296			36410	1980	$	214,315	2.54	$	544,051
2297			36410	1981	$	1,934,292	2.32	$	4,478,377
2298			36410	1982	$	594,071	2.19	$	1,303,033
2299			36410	1983	$	1,448,340	2.16	$	3,122,015
2300			36410	1984	$	1,336,951	2.12	$	2,833,060
2301			36410	1985	$	1,052,269	2.08	$	2,192,643
2302			36410	1986	$	1,771,655	2.04	$	3,616,309
2303			36410	1987	$	175,558	2.02	$	354,015
2304			36410	1988	$	335,581	1.95	$	654,278
2305			36410	1989	$	907,310	1.89	$	1,710,616
2306			36410	1990	$	597,088	1.82	$	1,084,834
2307			36410	1991	$	1,076,640	1.75	$	1,880,950
2308			36410	1992	$	386,332	1.66	$	641,336
2309			36410	1993	$	555,629	1.61	$	895,624
2310			36410	1994	$	422,398	1.51	$	639,634
2311			36410	1995	$	2,761,394	1.45	$	4,014,416
2312			36410	1996	$	287,517	1.41	$	406,462
2313			36410	1997	$	513,610	1.38	$	706,613
2314			36410	1998	$	602,147	1.36	$	818,289
2315			36410	1999	$	407,048	1.34	$	546,843
2316			36410	2000	$	443,860	1.32	$	584,522
2317			36410	2001	$	402,688	1.27	$	512,097
2318			36410	2002	$	651,187	1.22	$	794,281
2319			36410	2003	$	1,137,114	1.18	$	1,345,952
2320			36410	2004	$	456,590	1.15	$	523,112
2321			36410	2005	$	1,255,773	1.09	$	1,367,460
2322			36410	2006	$	2,302,634	1.04	$	2,391,558
2323			36410	2007	$	1,062,478	1.00	$	1,062,478
2324			36410	Total	$	30,244,834		$	73,416,226
2325									
2326		Poles, Towers and Fixtures	36420	1908	$	2,556	100.02	$	255,697
2327			36420	1913	$	2,884	83.35	$	240,362
2328			36420	1923	$	4,970	38.47	$	191,180
2329			36420	1924	$	11,655	35.72	$	416,339
2330			36420	1925	$	13,060	35.72	$	466,526
2331			36420	1926	$	35,004	35.72	$	1,250,397
2332			36420	1927	$	5,122	38.47	$	197,047
2333			36420	1928	$	13,435	38.47	$	516,827
2334			36420	1929	$	17,417	35.72	$	622,146
2335			36420	1930	$	135,522	35.72	$	4,840,974
2336			36420	1931	$	163,990	38.47	$	6,308,501
2337			36420	1932	$	154,747	41.67	$	6,449,028
2338			36420	1933	$	33,029	41.67	$	1,376,467

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
2339			36420	1934	$	115,596	38.47	$	4,446,839
2340			36420	1935	$	89,716	38.47	$	3,451,265
2341			36420	1936	$	165,295	35.72	$	5,904,522
2342			36420	1937	$	12,216	33.34	$	407,294
2343			36420	1938	$	61,037	31.26	$	1,907,755
2344			36420	1939	$	68,552	31.26	$	2,142,667
2345			36420	1940	$	46,880	31.26	$	1,465,291
2346			36420	1941	$	75,245	27.78	$	2,090,522
2347			36420	1942	$	72,089	27.78	$	2,002,839
2348			36420	1943	$	58,030	26.32	$	1,527,392
2349			36420	1944	$	62,217	23.81	$	1,481,643
2350			36420	1945	$	30,675	21.74	$	666,966
2351			36420	1946	$	54,566	20.84	$	1,137,006
2352			36420	1947	$	94,574	17.24	$	1,630,897
2353			36420	1948	$	886,200	15.63	$	13,849,500
2354			36420	1949	$	738,912	15.63	$	11,547,696
2355			36420	1950	$	694,816	14.71	$	10,219,819
2356			36420	1951	$	225,781	13.89	$	3,136,442
2357			36420	1952	$	585,128	13.16	$	7,700,515
2358			36420	1953	$	1,186,040	12.50	$	14,828,312
2359			36420	1954	$	631,180	12.20	$	7,698,777
2360			36420	1955	$	606,080	11.91	$	7,216,605
2361			36420	1956	$	408,363	11.11	$	4,538,225
2362			36420	1957	$	923,115	10.42	$	9,617,604
2363			36420	1958	$	1,116,184	10.21	$	11,391,792
2364			36420	1959	$	380,036	10.21	$	3,878,653
2365			36420	1960	$	370,625	9.81	$	3,634,267
2366			36420	1961	$	732,046	9.62	$	7,040,239
2367			36420	1962	$	706,739	9.44	$	6,668,618
2368			36420	1963	$	567,659	9.26	$	5,257,095
2369			36420	1964	$	1,067,341	9.09	$	9,704,945
2370			36420	1965	$	917,985	8.77	$	8,054,029
2371			36420	1966	$	1,918,658	8.48	$	16,262,894
2372			36420	1967	$	1,501,466	8.20	$	12,309,436
2373			36420	1968	$	1,823,032	7.81	$	14,245,141
2374			36420	1969	$	1,517,710	7.14	$	10,842,844
2375			36420	1970	$	2,102,830	6.41	$	13,482,240
2376			36420	1971	$	2,143,111	5.95	$	12,759,030
2377			36420	1972	$	3,642,045	5.62	$	20,464,806
2378			36420	1973	$	4,111,034	5.00	$	20,559,070
2379			36420	1974	$	3,997,773	4.03	$	16,123,110
2380			36420	1975	$	4,265,758	3.52	$	15,023,123
2381			36420	1976	$	3,698,244	3.52	$	13,024,457
2382			36420	1977	$	4,010,070	3.33	$	13,369,436
2383			36420	1978	$	2,731,859	3.11	$	8,485,643
2384			36420	1979	$	2,574,576	2.76	$	7,113,437
2385			36420	1980	$	2,660,549	2.54	$	6,753,942
2386			36420	1981	$	3,279,803	2.32	$	7,593,576
2387			36420	1982	$	4,131,282	2.19	$	9,061,547
2388			36420	1983	$	3,445,162	2.16	$	7,426,327
2389			36420	1984	$	5,561,126	2.12	$	11,784,282
2390			36420	1985	$	1,594,086	2.08	$	3,321,642
2391			36420	1986	$	2,208,693	2.04	$	4,508,391
2392			36420	1987	$	6,892,120	2.02	$	13,898,040
2393			36420	1988	$	3,977,540	1.95	$	7,754,961
2394			36420	1989	$	2,137,029	1.89	$	4,029,095
2395			36420	1990	$	3,809,780	1.82	$	6,921,893
2396			36420	1991	$	2,952,790	1.75	$	5,158,690
2397			36420	1992	$	5,312,044	1.66	$	8,818,342
2398			36420	1993	$	3,773,523	1.61	$	6,082,577
2399			36420	1994	$	3,918,891	1.51	$	5,934,345
2400			36420	1995	$	6,699,479	1.45	$	9,739,462
2401			36420	1996	$	6,136,460	1.41	$	8,675,087
2402			36420	1997	$	6,857,560	1.38	$	9,434,472
2403			36420	1998	$	8,286,964	1.36	$	11,261,597
2404			36420	1999	$	6,911,619	1.34	$	9,285,332
2405			36420	2000	$	7,351,263	1.32	$	9,680,918
2406			36420	2001	$	11,168,837	1.27	$	14,203,377
2407			36420	2002	$	9,114,085	1.22	$	11,116,846
2408			36420	2003	$	7,254,575	1.18	$	8,586,925
2409			36420	2004	$	7,563,074	1.15	$	8,664,959

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
2410			36420	2005	$ 8,610,730	1.09	$ 9,376,552
2411			36420	2006	$ 9,340,813	1.04	$ 9,701,542
2412			36420	2007	$ 18,833,205	1.00	$ 18,833,205
2413			36420	Total	$ 224,165,558		$ 641,050,115
2414							
2415		Overhead Conductors, Device	36500	1921	$ 979	33.24	$ 32,546
2416			36500	1922	$ 1,938	37.15	$ 71,982
2417			36500	1923	$ 4,086	35.08	$ 143,361
2418			36500	1924	$ 5,200	33.24	$ 172,840
2419			36500	1925	$ 6,614	31.58	$ 208,831
2420			36500	1926	$ 6,256	33.24	$ 207,948
2421			36500	1927	$ 11,785	33.24	$ 391,702
2422			36500	1928	$ 14,624	31.58	$ 461,785
2423			36500	1929	$ 15,780	28.71	$ 452,986
2424			36500	1930	$ 23,519	33.24	$ 781,733
2425			36500	1931	$ 34,110	37.15	$ 1,267,153
2426			36500	1932	$ 51,955	39.47	$ 2,050,664
2427			36500	1933	$ 70,644	39.47	$ 2,788,363
2428			36500	1934	$ 363,578	35.08	$ 12,756,054
2429			36500	1935	$ 19,065	35.08	$ 668,908
2430			36500	1936	$ 93,663	33.24	$ 3,113,195
2431			36500	1937	$ 26,369	31.58	$ 832,643
2432			36500	1938	$ 73,567	33.24	$ 2,445,251
2433			36500	1939	$ 62,716	33.24	$ 2,084,573
2434			36500	1940	$ 169,102	33.24	$ 5,620,644
2435			36500	1941	$ 108,882	33.24	$ 3,619,059
2436			36500	1942	$ 46,907	30.07	$ 1,410,611
2437			36500	1943	$ 57,868	30.07	$ 1,740,248
2438			36500	1944	$ 6,464	30.07	$ 194,399
2439			36500	1945	$ 61,604	28.71	$ 1,768,397
2440			36500	1946	$ 10,711	25.26	$ 270,577
2441			36500	1947	$ 155,777	21.78	$ 3,392,316
2442			36500	1948	$ 313,352	20.37	$ 6,383,550
2443			36500	1949	$ 182,573	20.37	$ 3,719,348
2444			36500	1950	$ 255,087	19.14	$ 4,881,647
2445			36500	1951	$ 236,012	17.07	$ 4,028,312
2446			36500	1952	$ 614,978	16.19	$ 9,958,317
2447			36500	1953	$ 328,358	15.40	$ 5,057,730
2448			36500	1954	$ 476,563	15.04	$ 7,165,760
2449			36500	1955	$ 725,235	13.73	$ 9,956,631
2450			36500	1956	$ 1,087,798	12.63	$ 13,739,459
2451			36500	1957	$ 738,424	12.89	$ 9,517,026
2452			36500	1958	$ 980,397	12.89	$ 12,635,633
2453			36500	1959	$ 488,829	12.63	$ 6,174,163
2454			36500	1960	$ 397,464	12.38	$ 4,921,739
2455			36500	1961	$ 589,908	12.14	$ 7,164,273
2456			36500	1962	$ 816,331	11.69	$ 9,546,934
2457			36500	1963	$ 773,368	11.69	$ 9,044,487
2458			36500	1964	$ 697,088	11.28	$ 7,861,231
2459			36500	1965	$ 700,686	10.70	$ 7,500,021
2460			36500	1966	$ 1,181,830	10.35	$ 12,235,356
2461			36500	1967	$ 1,472,909	9.72	$ 14,310,471
2462			36500	1968	$ 1,448,125	9.15	$ 13,254,036
2463			36500	1969	$ 1,339,519	7.99	$ 10,708,113
2464			36500	1970	$ 1,196,297	7.10	$ 8,488,685
2465			36500	1971	$ 1,852,297	6.44	$ 11,936,465
2466			36500	1972	$ 1,998,202	6.38	$ 12,746,631
2467			36500	1973	$ 2,533,063	6.32	$ 15,996,955
2468			36500	1974	$ 2,951,050	5.44	$ 16,066,076
2469			36500	1975	$ 2,426,181	4.42	$ 10,714,659
2470			36500	1976	$ 5,101,935	3.92	$ 20,012,451
2471			36500	1977	$ 4,905,510	3.63	$ 17,804,353
2472			36500	1978	$ 3,052,485	3.71	$ 11,339,552
2473			36500	1979	$ 4,172,061	3.47	$ 14,476,731
2474			36500	1980	$ 3,731,118	3.14	$ 11,722,877
2475			36500	1981	$ 3,974,023	2.87	$ 11,407,723
2476			36500	1982	$ 5,969,560	2.73	$ 16,320,055
2477			36500	1983	$ 6,219,905	2.59	$ 16,098,492
2478			36500	1984	$ 5,062,213	2.57	$ 12,995,606
2479			36500	1985	$ 3,489,271	2.56	$ 8,921,318
2480			36500	1986	$ 3,682,570	2.54	$ 9,339,915

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
2481			36500	1987	$	3,512,590	2.55	$	8,944,725
2482			36500	1988	$	3,823,648	2.16	$	8,255,498
2483			36500	1989	$	2,483,172	2.08	$	5,167,010
2484			36500	1990	$	2,060,308	2.07	$	4,255,563
2485			36500	1991	$	5,174,422	2.02	$	10,448,545
2486			36500	1992	$	3,388,609	2.07	$	7,016,376
2487			36500	1993	$	3,180,038	2.00	$	6,350,282
2488			36500	1994	$	3,578,880	1.91	$	6,843,772
2489			36500	1995	$	3,363,487	1.78	$	5,991,903
2490			36500	1996	$	4,381,971	1.74	$	7,634,010
2491			36500	1997	$	3,863,778	1.71	$	6,590,348
2492			36500	1998	$	6,933,829	1.66	$	11,530,989
2493			36500	1999	$	4,496,806	1.71	$	7,685,656
2494			36500	2000	$	4,005,718	1.61	$	6,432,842
2495			36500	2001	$	6,659,566	1.52	$	10,146,416
2496			36500	2002	$	5,370,063	1.47	$	7,909,818
2497			36500	2003	$	2,893,824	1.43	$	4,125,338
2498			36500	2004	$	3,171,980	1.35	$	4,275,748
2499			36500	2005	$	4,329,921	1.22	$	5,289,087
2500			36500	2006	$	5,048,281	1.09	$	5,492,026
2501			36500	2007	$	7,859,535	1.00	$	7,859,535
2502			36500	Total	$	169,246,767		$	613,347,038
2503									
2504		Underground Conduit	36600	1926	$	11,051	24.92	$	275,390
2505			36600	1927	$	28	24.92	$	690
2506			36600	1928	$	48,539	24.92	$	1,209,585
2507			36600	1931	$	7,620	24.92	$	189,899
2508			36600	1932	$	111,891	27.85	$	3,116,350
2509			36600	1937	$	786	24.92	$	19,581
2510			36600	1938	$	1	23.67	$	24
2511			36600	1939	$	944	23.67	$	22,349
2512			36600	1943	$	654	21.52	$	14,079
2513			36600	1952	$	4,071	11.84	$	48,184
2514			36600	1954	$	4,549	11.01	$	50,087
2515			36600	1956	$	10,847	10.07	$	109,270
2516			36600	1957	$	47,553	9.66	$	459,493
2517			36600	1958	$	7,091	9.28	$	65,834
2518			36600	1959	$	16,814	9.11	$	153,102
2519			36600	1962	$	2,234	8.31	$	18,560
2520			36600	1963	$	10,621	8.03	$	85,234
2521			36600	1964	$	32,630	7.89	$	257,496
2522			36600	1965	$	11,883	7.76	$	92,237
2523			36600	1966	$	3,606	7.64	$	27,541
2524			36600	1967	$	10,829	7.40	$	80,111
2525			36600	1968	$	1,018	7.07	$	7,197
2526			36600	1970	$	10,243	5.85	$	59,876
2527			36600	1971	$	741	5.38	$	3,988
2528			36600	1975	$	64,407	3.91	$	252,029
2529			36600	1977	$	76,934	3.48	$	267,844
2530			36600	1980	$	11,517	2.75	$	31,705
2531			36600	1981	$	270,600	2.56	$	692,557
2532			36600	1982	$	173,532	2.40	$	417,075
2533			36600	1983	$	113,712	2.25	$	256,381
2534			36600	1984	$	481,130	2.17	$	1,044,974
2535			36600	1985	$	431,625	2.14	$	924,728
2536			36600	1986	$	1,062,296	2.10	$	2,235,440
2537			36600	1989	$	81,768	1.76	$	143,923
2538			36600	1991	$	16,185	1.81	$	29,250
2539			36600	1992	$	54	1.79	$	96
2540			36600	1993	$	93,550	1.75	$	163,295
2541			36600	1994	$	17,398	1.67	$	29,006
2542			36600	1995	$	32	1.62	$	52
2543			36600	1996	$	5,682	1.59	$	9,028
2544			36600	1997	$	4,422	1.55	$	6,837
2545			36600	1998	$	119,707	1.51	$	180,219
2546			36600	1999	$	3,129	1.46	$	4,555
2547			36600	2000	$	12,338	1.40	$	17,309
2548			36600	2001	$	180,239	1.35	$	243,478
2549			36600	2002	$	793	1.27	$	1,011
2550			36600	2003	$	3,283	1.23	$	4,048
2551			36600	2004	$	20,510	1.18	$	24,232

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
2552			36600	2005	$	12,558	1.11	$	13,884
2553			36600	2006	$	22,168	1.04	$	23,043
2554			36600	2007	$	10,221	1.00	$	10,221
2555			36600	Total	$	3,646,036		$	13,392,377
2556									
2557		Undergrnd Conductors,Device	36700	1929	$	30	20.89	$	627
2558			36700	1931	$	538	26.11	$	14,049
2559			36700	1932	$	2,050	27.49	$	56,353
2560			36700	1933	$	2,216	26.11	$	57,859
2561			36700	1934	$	30	23.74	$	723
2562			36700	1936	$	27,050	22.71	$	614,231
2563			36700	1937	$	359	20.09	$	7,221
2564			36700	1938	$	20,752	22.71	$	471,229
2565			36700	1940	$	19,341	21.76	$	420,888
2566			36700	1941	$	469	19.34	$	9,070
2567			36700	1942	$	2,879	18.65	$	53,692
2568			36700	1943	$	6,271	18.65	$	116,971
2569			36700	1944	$	966	19.34	$	18,688
2570			36700	1945	$	2,712	19.34	$	52,452
2571			36700	1947	$	954	13.74	$	13,107
2572			36700	1948	$	27,068	11.61	$	314,155
2573			36700	1949	$	445	10.45	$	4,643
2574			36700	1950	$	10,225	9.85	$	100,754
2575			36700	1951	$	15,433	7.91	$	122,126
2576			36700	1953	$	6,961	7.80	$	54,258
2577			36700	1954	$	36,603	7.57	$	277,053
2578			36700	1955	$	275,737	7.25	$	2,000,124
2579			36700	1956	$	23,074	7.36	$	169,729
2580			36700	1957	$	59,179	8.42	$	498,508
2581			36700	1958	$	9,588	8.56	$	82,094
2582			36700	1959	$	24,391	8.16	$	199,040
2583			36700	1960	$	8,122	8.03	$	65,259
2584			36700	1961	$	58,789	8.16	$	479,743
2585			36700	1962	$	41,754	8.16	$	340,736
2586			36700	1963	$	1,056	8.03	$	8,485
2587			36700	1964	$	25,474	7.46	$	190,060
2588			36700	1965	$	6,994	6.96	$	48,704
2589			36700	1966	$	31,227	6.87	$	214,590
2590			36700	1967	$	67,479	6.70	$	451,822
2591			36700	1968	$	42,414	6.87	$	291,470
2592			36700	1969	$	48,250	6.29	$	303,606
2593			36700	1970	$	143,856	5.93	$	853,770
2594			36700	1971	$	48,291	5.93	$	286,600
2595			36700	1972	$	98,468	5.28	$	519,460
2596			36700	1973	$	156,934	5.22	$	819,618
2597			36700	1974	$	123,729	4.18	$	516,957
2598			36700	1975	$	2,643,610	4.05	$	10,702,916
2599			36700	1976	$	181,391	3.93	$	712,294
2600			36700	1977	$	950,627	3.68	$	3,496,360
2601			36700	1978	$	2,056,463	3.46	$	7,112,762
2602			36700	1979	$	3,183,036	2.82	$	8,985,953
2603			36700	1980	$	2,740,412	2.50	$	6,848,002
2604			36700	1981	$	3,584,449	2.44	$	8,747,883
2605			36700	1982	$	2,160,703	2.48	$	5,348,193
2606			36700	1983	$	1,085,685	2.45	$	2,662,064
2607			36700	1984	$	1,043,093	2.46	$	2,569,695
2608			36700	1985	$	2,788,624	2.40	$	6,680,789
2609			36700	1986	$	2,169,615	2.28	$	4,948,135
2610			36700	1987	$	3,970,558	2.23	$	8,861,964
2611			36700	1988	$	5,548,597	2.19	$	12,137,638
2612			36700	1989	$	5,852,429	2.05	$	12,009,992
2613			36700	1990	$	7,858,549	1.97	$	15,458,671
2614			36700	1991	$	6,167,647	1.92	$	11,864,352
2615			36700	1992	$	3,520,873	1.90	$	6,698,882
2616			36700	1993	$	4,774,550	1.88	$	8,985,946
2617			36700	1994	$	6,615,598	1.86	$	12,306,758
2618			36700	1995	$	5,930,601	1.78	$	10,571,228
2619			36700	1996	$	7,424,620	1.74	$	12,936,280
2620			36700	1997	$	7,867,587	1.73	$	13,583,463
2621			36700	1998	$	7,690,405	1.70	$	13,061,663
2622			36700	1999	$	6,929,615	1.66	$	11,525,873

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
2623			36700	2000	$ 3,616,156	1.62	$ 5,865,238
2624			36700	2001	$ 15,325,371	1.62	$ 24,780,087
2625			36700	2002	$ 12,157,541	1.59	$ 19,314,094
2626			36700	2003	$ 10,638,061	1.56	$ 16,584,868
2627			36700	2004	$ 9,579,262	1.46	$ 14,023,694
2628			36700	2005	$ 15,938,224	1.31	$ 20,927,825
2629			36700	2006	$ 16,561,842	1.17	$ 19,372,315
2630			36700	2007	$ 15,486,143	1.00	$ 15,486,143
2631			36700	Total	$ 205,520,093		$ 366,292,540
2632							
2633		Line Transformers	36800	1921	$ 1,494	6.58	$ 9,824
2634			36800	1922	$ 1,550	7.42	$ 11,508
2635			36800	1923	$ 1,060	7.55	$ 7,998
2636			36800	1926	$ 874	7.94	$ 6,938
2637			36800	1927	$ 4,312	8.68	$ 37,449
2638			36800	1928	$ 66	8.85	$ 584
2639			36800	1930	$ 4,856	8.37	$ 40,641
2640			36800	1931	$ 8,798	8.52	$ 74,995
2641			36800	1932	$ 11,256	8.85	$ 99,637
2642			36800	1933	$ 6,327	8.68	$ 54,951
2643			36800	1934	$ 6,011	8.37	$ 50,307
2644			36800	1935	$ 6,947	8.22	$ 57,102
2645			36800	1937	$ 9,529	7.67	$ 73,105
2646			36800	1938	$ 25,148	7.55	$ 189,767
2647			36800	1939	$ 2,109	7.55	$ 15,911
2648			36800	1940	$ 1,571	7.55	$ 11,858
2649			36800	1941	$ 9,284	7.31	$ 67,830
2650			36800	1942	$ 33,146	7.31	$ 242,175
2651			36800	1943	$ 18,251	7.80	$ 142,391
2652			36800	1944	$ 17,436	7.80	$ 136,028
2653			36800	1945	$ 377	7.80	$ 2,941
2654			36800	1946	$ 39,220	6.97	$ 273,530
2655			36800	1947	$ 91,813	5.61	$ 515,385
2656			36800	1948	$ 72,857	5.42	$ 394,544
2657			36800	1949	$ 69,871	5.29	$ 369,674
2658			36800	1950	$ 64,029	5.00	$ 320,354
2659			36800	1951	$ 9,946	4.47	$ 44,448
2660			36800	1952	$ 118,730	4.43	$ 525,494
2661			36800	1953	$ 83,207	4.18	$ 348,182
2662			36800	1954	$ 195,558	4.11	$ 803,707
2663			36800	1955	$ 254,973	4.11	$ 1,047,892
2664			36800	1956	$ 189,664	4.00	$ 759,153
2665			36800	1957	$ 275,508	3.77	$ 1,039,480
2666			36800	1958	$ 58,196	3.87	$ 225,105
2667			36800	1959	$ 93,312	4.04	$ 376,768
2668			36800	1960	$ 416,164	4.07	$ 1,695,225
2669			36800	1961	$ 360,978	4.22	$ 1,524,387
2670			36800	1962	$ 283,131	4.60	$ 1,303,253
2671			36800	1963	$ 362,643	4.95	$ 1,794,887
2672			36800	1964	$ 380,844	4.95	$ 1,884,971
2673			36800	1965	$ 289,723	4.85	$ 1,403,783
2674			36800	1966	$ 757,355	4.79	$ 3,631,358
2675			36800	1967	$ 846,896	4.60	$ 3,898,264
2676			36800	1968	$ 1,405,328	4.47	$ 6,280,315
2677			36800	1969	$ 917,512	4.56	$ 4,181,492
2678			36800	1970	$ 1,612,389	4.51	$ 7,276,302
2679			36800	1971	$ 2,065,051	4.51	$ 9,319,049
2680			36800	1972	$ 2,895,790	4.60	$ 13,329,322
2681			36800	1973	$ 3,113,547	4.60	$ 14,331,658
2682			36800	1974	$ 3,678,946	4.22	$ 15,535,954
2683			36800	1975	$ 2,971,749	3.54	$ 10,522,278
2684			36800	1976	$ 2,695,344	3.44	$ 9,258,711
2685			36800	1977	$ 3,201,853	3.17	$ 10,164,227
2686			36800	1978	$ 3,981,686	2.97	$ 11,824,326
2687			36800	1979	$ 4,100,695	2.81	$ 11,509,453
2688			36800	1980	$ 3,444,070	2.81	$ 9,666,499
2689			36800	1981	$ 3,761,020	2.40	$ 9,016,656
2690			36800	1982	$ 1,918,662	2.22	$ 4,266,476
2691			36800	1983	$ 3,617,726	2.19	$ 7,929,713
2692			36800	1984	$ 4,234,533	2.17	$ 9,194,131
2693			36800	1985	$ 3,723,862	2.15	$ 8,009,784

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost	Adjustment Factor	Reproduction Cost
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
2694			36800	1986	$ 4,131,497	2.14	$ 8,845,248
2695			36800	1987	$ 8,291,707	2.15	$ 17,834,923
2696			36800	1988	$ 3,539,221	2.13	$ 7,533,427
2697			36800	1989	$ 7,560,793	2.05	$ 15,502,155
2698			36800	1990	$ 4,350,524	2.02	$ 8,792,740
2699			36800	1991	$ 5,330,530	2.02	$ 10,785,245
2700			36800	1992	$ 3,704,660	1.98	$ 7,350,237
2701			36800	1993	$ 5,733,577	1.97	$ 11,314,753
2702			36800	1994	$ 6,653,442	1.94	$ 12,881,514
2703			36800	1995	$ 7,029,524	1.96	$ 13,812,980
2704			36800	1996	$ 7,538,364	2.00	$ 15,086,564
2705			36800	1997	$ 5,740,643	2.08	$ 11,956,645
2706			36800	1998	$ 6,933,178	2.04	$ 14,168,002
2707			36800	1999	$ 7,629,556	2.03	$ 15,505,011
2708			36800	2000	$ 7,695,643	2.02	$ 15,570,572
2709			36800	2001	$ 4,536,920	1.95	$ 8,839,554
2710			36800	2002	$ 4,467,004	1.87	$ 8,366,887
2711			36800	2003	$ 5,972,556	1.84	$ 11,018,709
2712			36800	2004	$ 8,682,718	1.76	$ 15,268,981
2713			36800	2005	$ 7,392,735	1.59	$ 11,723,949
2714			36800	2006	$ 9,555,541	1.27	$ 12,133,562
2715			36800	2007	$ 4,336,248	1.00	$ 4,336,248
2716			36800	Total	$ 195,631,364		$ 455,758,036
2717							
2718		Services	36910	1937	$ 2,496	25.40	$ 63,415
2719			36910	1938	$ 1,676	26.90	$ 45,075
2720			36910	1939	$ 3,087	26.90	$ 83,022
2721			36910	1940	$ 4,832	26.90	$ 129,985
2722			36910	1941	$ 6,702	26.90	$ 180,266
2723			36910	1942	$ 5,813	25.40	$ 147,680
2724			36910	1943	$ 3,259	24.07	$ 78,443
2725			36910	1944	$ 3,923	24.07	$ 94,421
2726			36910	1945	$ 6,908	24.07	$ 166,249
2727			36910	1946	$ 15,545	20.79	$ 323,096
2728			36910	1947	$ 28,207	17.59	$ 496,086
2729			36910	1948	$ 38,094	16.33	$ 622,116
2730			36910	1949	$ 42,255	16.33	$ 690,077
2731			36910	1950	$ 46,407	15.24	$ 707,356
2732			36910	1951	$ 53,942	13.06	$ 704,749
2733			36910	1952	$ 63,699	12.36	$ 787,230
2734			36910	1953	$ 28,702	11.72	$ 336,530
2735			36910	1954	$ 108,575	11.43	$ 1,241,206
2736			36910	1955	$ 141,177	10.63	$ 1,501,298
2737			36910	1956	$ 193,527	9.94	$ 1,923,786
2738			36910	1957	$ 204,401	10.39	$ 2,124,239
2739			36910	1958	$ 216,573	10.39	$ 2,250,738
2740			36910	1959	$ 177,250	9.94	$ 1,761,978
2741			36910	1960	$ 204,386	9.53	$ 1,947,076
2742			36910	1961	$ 223,985	9.33	$ 2,090,239
2743			36910	1962	$ 227,838	9.15	$ 2,083,671
2744			36910	1963	$ 245,633	9.15	$ 2,246,408
2745			36910	1964	$ 253,253	8.79	$ 2,227,017
2746			36910	1965	$ 287,454	8.31	$ 2,389,894
2747			36910	1966	$ 347,702	8.02	$ 2,789,363
2748			36910	1967	$ 381,497	7.50	$ 2,859,790
2749			36910	1968	$ 425,346	7.03	$ 2,992,278
2750			36910	1969	$ 569,273	6.10	$ 3,470,819
2751			36910	1970	$ 523,389	5.26	$ 2,750,923
2752			36910	1971	$ 653,149	4.86	$ 3,177,295
2753			36910	1972	$ 900,811	4.71	$ 4,246,535
2754			36910	1973	$ 800,813	4.57	$ 3,661,878
2755			36910	1974	$ 275,568	4.23	$ 1,166,749
2756			36910	1975	$ 870,399	3.84	$ 3,344,602
2757			36910	1976	$ 801,189	3.60	$ 2,884,721
2758			36910	1977	$ 797,948	3.29	$ 2,625,019
2759			36910	1978	$ 522,106	3.05	$ 1,591,622
2760			36910	1979	$ 791,969	2.81	$ 2,221,740
2761			36910	1980	$ 618,434	2.53	$ 1,562,383
2762			36910	1981	$ 784,467	2.34	$ 1,839,557
2763			36910	1982	$ 966,481	2.23	$ 2,155,820
2764			36910	1983	$ 814,885	2.18	$ 1,774,393

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
2765			36910	1984	$	653,231	2.04	$	1,333,496
2766			36910	1985	$	812,737	2.05	$	1,666,548
2767			36910	1986	$	466,429	2.03	$	947,929
2768			36910	1987	$	624,577	1.98	$	1,236,365
2769			36910	1988	$	497,317	1.83	$	911,456
2770			36910	1989	$	528,217	1.74	$	916,652
2771			36910	1990	$	973,541	1.73	$	1,683,067
2772			36910	1991	$	1,682,667	1.72	$	2,887,180
2773			36910	1992	$	435,271	1.72	$	747,555
2774			36910	1993	$	431,683	1.68	$	724,388
2775			36910	1994	$	547,419	1.61	$	882,957
2776			36910	1995	$	972,264	1.53	$	1,489,405
2777			36910	1996	$	1,236,417	1.51	$	1,870,560
2778			36910	1997	$	1,685,322	1.49	$	2,516,400
2779			36910	1998	$	1,350,142	1.46	$	1,977,197
2780			36910	1999	$	523,879	1.45	$	760,490
2781			36910	2000	$	1,243,655	1.41	$	1,749,804
2782			36910	2001	$	1,185,602	1.35	$	1,606,342
2783			36910	2002	$	427,425	1.30	$	556,833
2784			36910	2003	$	1,398,706	1.26	$	1,755,900
2785			36910	2004	$	736,306	1.20	$	884,865
2786			36910	2005	$	1,535,496	1.12	$	1,726,212
2787			36910	2006	$	1,033,694	1.05	$	1,089,746
2788			36910	2007	$	1,687,295	1.00	$	1,687,295
2789			36910	Total	$	37,354,317		$	110,167,475
2790									
2791		Services - Underground	36920	1931	$	623	20.71	$	12,902
2792			36920	1932	$	189	22.01	$	4,162
2793			36920	1939	$	1,729	19.56	$	33,816
2794			36920	1940	$	3,112	17.61	$	54,789
2795			36920	1941	$	3,295	15.31	$	50,437
2796			36920	1942	$	5,778	15.31	$	88,458
2797			36920	1943	$	1,848	14.67	$	27,119
2798			36920	1944	$	9	14.67	$	128
2799			36920	1945	$	86	14.67	$	1,269
2800			36920	1946	$	1,628	13.04	$	21,234
2801			36920	1947	$	3,529	11.36	$	40,083
2802			36920	1949	$	19	9.78	$	183
2803			36920	1950	$	31	9.27	$	290
2804			36920	1954	$	4,049	8.00	$	32,406
2805			36920	1955	$	192	8.00	$	1,539
2806			36920	1956	$	655	7.65	$	5,014
2807			36920	1957	$	1,621	7.82	$	12,687
2808			36920	1958	$	685	8.19	$	5,606
2809			36920	1959	$	1,384	8.00	$	11,077
2810			36920	1962	$	4,103	7.82	$	32,107
2811			36920	1964	$	4,019	7.34	$	29,480
2812			36920	1965	$	82	6.77	$	554
2813			36920	1966	$	9,525	6.29	$	59,893
2814			36920	1967	$	206	5.97	$	1,230
2815			36920	1968	$	5,524	5.50	$	30,389
2816			36920	1969	$	32,446	4.89	$	158,674
2817			36920	1970	$	60,930	4.51	$	275,055
2818			36920	1971	$	38,863	4.35	$	168,938
2819			36920	1972	$	113,703	4.00	$	454,956
2820			36920	1973	$	168,211	3.52	$	592,290
2821			36920	1974	$	145,882	3.06	$	446,669
2822			36920	1975	$	388,363	3.26	$	1,266,179
2823			36920	1976	$	1,123,285	3.17	$	3,563,261
2824			36920	1977	$	1,814,771	2.98	$	5,415,274
2825			36920	1978	$	2,601,935	2.79	$	7,271,207
2826			36920	1979	$	2,619,897	2.57	$	6,733,553
2827			36920	1980	$	1,358,903	2.17	$	2,953,616
2828			36920	1981	$	2,051,924	1.95	$	3,991,749
2829			36920	1982	$	981,277	1.95	$	1,908,945
2830			36920	1983	$	1,153,795	1.77	$	2,041,532
2831			36920	1984	$	1,525,604	1.73	$	2,646,222
2832			36920	1985	$	1,351,681	1.88	$	2,545,150
2833			36920	1986	$	2,290,533	1.95	$	4,455,933
2834			36920	1987	$	2,938,075	1.82	$	5,332,634
2835			36920	1988	$	3,914,226	1.70	$	6,642,145

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
	(a)	(b)	(c)	(d)		(e)	(f)		(g)
2836			36920	1989	$	4,278,578	1.57	$	6,733,131
2837			36920	1990	$	4,451,225	1.55	$	6,912,146
2838			36920	1991	$	3,630,821	1.62	$	5,871,206
2839			36920	1992	$	5,008,474	1.63	$	8,164,551
2840			36920	1993	$	5,234,201	1.63	$	8,542,406
2841			36920	1994	$	5,194,041	1.56	$	8,119,350
2842			36920	1995	$	6,014,942	1.51	$	9,109,386
2843			36920	1996	$	6,152,228	1.51	$	9,307,293
2844			36920	1997	$	6,007,417	1.49	$	8,953,578
2845			36920	1998	$	5,374,601	1.52	$	8,148,378
2846			36920	1999	$	5,413,802	1.52	$	8,243,303
2847			36920	2000	$	5,237,721	1.45	$	7,581,761
2848			36920	2001	$	5,704,786	1.43	$	8,132,480
2849			36920	2002	$	5,337,634	1.36	$	7,277,615
2850			36920	2003	$	8,866,737	1.33	$	11,781,445
2851			36920	2004	$	5,867,599	1.30	$	7,616,779
2852			36920	2005	$	9,504,588	1.18	$	11,174,217
2853			36920	2006	$	5,961,342	0.98	$	5,851,035
2854			36920	2007	$	6,063,825	1.00	$	6,063,825
2855			36920	Total	$	136,032,788		$	213,004,719
2856									
2857		Customers Metering Stations	37010	1928	$	1,827	7.56	$	13,817
2858			37010	1929	$	301	7.56	$	2,274
2859			37010	1930	$	14	7.56	$	104
2860			37010	1933	$	186	7.39	$	1,376
2861			37010	1935	$	217	6.77	$	1,469
2862			37010	1936	$	4,993	6.77	$	33,824
2863			37010	1937	$	30	6.77	$	204
2864			37010	1939	$	144	6.77	$	976
2865			37010	1940	$	1,081	6.77	$	7,321
2866			37010	1941	$	1,678	6.64	$	11,132
2867			37010	1942	$	1,137	6.64	$	7,542
2868			37010	1943	$	3,507	6.64	$	23,273
2869			37010	1944	$	169	6.64	$	1,122
2870			37010	1945	$	2,961	6.64	$	19,650
2871			37010	1946	$	328	5.91	$	1,938
2872			37010	1947	$	1,443	5.24	$	7,567
2873			37010	1948	$	729	5.00	$	3,646
2874			37010	1949	$	1,380	4.58	$	6,318
2875			37010	1950	$	10,804	4.58	$	49,477
2876			37010	1951	$	6,888	4.58	$	31,542
2877			37010	1952	$	9,960	4.64	$	46,265
2878			37010	1953	$	14,056	4.45	$	62,607
2879			37010	1954	$	2,298	4.34	$	9,963
2880			37010	1955	$	29,902	4.52	$	135,035
2881			37010	1956	$	20,046	4.34	$	86,905
2882			37010	1957	$	20,272	4.12	$	83,434
2883			37010	1958	$	13,594	4.01	$	54,568
2884			37010	1959	$	16,330	3.92	$	63,972
2885			37010	1960	$	34,394	3.87	$	133,133
2886			37010	1961	$	34,182	3.92	$	133,906
2887			37010	1962	$	13,945	3.92	$	54,628
2888			37010	1963	$	31,871	3.92	$	124,852
2889			37010	1964	$	25,900	3.92	$	101,462
2890			37010	1965	$	14,324	3.92	$	56,113
2891			37010	1966	$	38,542	3.92	$	150,987
2892			37010	1967	$	44,916	3.87	$	173,860
2893			37010	1968	$	90,397	3.74	$	337,841
2894			37010	1969	$	68,185	3.57	$	243,627
2895			37010	1970	$	96,366	3.42	$	329,820
2896			37010	1971	$	89,214	3.25	$	290,074
2897			37010	1972	$	26,253	3.22	$	84,515
2898			37010	1973	$	62,112	3.25	$	201,955
2899			37010	1974	$	182,264	3.01	$	548,726
2900			37010	1975	$	147,395	2.62	$	386,491
2901			37010	1976	$	183,110	2.44	$	447,648
2902			37010	1977	$	124,942	2.32	$	290,174
2903			37010	1978	$	105,838	2.26	$	238,978
2904			37010	1979	$	355,957	2.20	$	782,012
2905			37010	1980	$	469,061	2.23	$	1,044,609
2906			37010	1981	$	269,456	1.99	$	537,499

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
2907			37010	1982	$ 237,475	1.71	$ 406,389
2908			37010	1983	$ 272,577	1.60	$ 436,587
2909			37010	1984	$ 392,111	1.59	$ 624,965
2910			37010	1985	$ 379,330	1.58	$ 598,726
2911			37010	1986	$ 310,061	1.54	$ 477,795
2912			37010	1987	$ 290,788	1.54	$ 448,097
2913			37010	1988	$ 275,668	1.65	$ 453,834
2914			37010	1989	$ 281,232	1.73	$ 486,390
2915			37010	1990	$ 346,277	1.72	$ 597,297
2916			37010	1991	$ 300,150	1.60	$ 481,343
2917			37010	1992	$ 278,848	1.61	$ 448,287
2918			37010	1993	$ 550,595	1.59	$ 873,285
2919			37010	1994	$ 206,770	1.67	$ 345,213
2920			37010	1995	$ 410,911	1.69	$ 695,864
2921			37010	1996	$ 423,102	1.66	$ 700,991
2922			37010	1997	$ 206,612	1.54	$ 319,140
2923			37010	1998	$ 237,961	1.50	$ 356,964
2924			37010	1999	$ 131,263	1.55	$ 203,965
2925			37010	2000	$ 241,634	1.57	$ 380,005
2926			37010	2001	$ 353,709	1.38	$ 488,352
2927			37010	2002	$ 591,933	1.21	$ 714,153
2928			37010	2003	$ 271,448	1.12	$ 303,039
2929			37010	2004	$ 227,086	1.03	$ 233,843
2930			37010	2005	$ 384,231	1.06	$ 406,941
2931			37010	2006	$ 167,445	1.03	$ 172,700
2932			37010	2007	$ 677,027	1.00	$ 677,027
2933			37010	Total	$ 11,121,145		$ 19,791,425
2934							
2935		Meters	37020	1930	$ 950	7.56	$ 7,183
2936			37020	1932	$ 25	7.56	$ 188
2937			37020	1933	$ 46	7.39	$ 338
2938			37020	1934	$ 51	6.77	$ 342
2939			37020	1935	$ 159	6.77	$ 1,076
2940			37020	1936	$ 9,826	6.77	$ 66,563
2941			37020	1937	$ 4,807	6.77	$ 32,562
2942			37020	1938	$ 12,415	6.77	$ 84,094
2943			37020	1939	$ 14,335	6.77	$ 97,102
2944			37020	1940	$ 21,268	6.77	$ 144,066
2945			37020	1941	$ 23,997	6.64	$ 159,237
2946			37020	1942	$ 24,555	6.64	$ 162,940
2947			37020	1943	$ 9,441	6.64	$ 62,647
2948			37020	1944	$ 8,109	6.64	$ 53,808
2949			37020	1945	$ 46,509	6.64	$ 308,618
2950			37020	1946	$ 40,490	5.91	$ 239,366
2951			37020	1947	$ 31,267	5.24	$ 163,974
2952			37020	1948	$ 122,548	5.00	$ 613,014
2953			37020	1949	$ 113,310	4.58	$ 518,906
2954			37020	1950	$ 135,111	4.58	$ 618,742
2955			37020	1951	$ 148,524	4.58	$ 680,165
2956			37020	1952	$ 153,773	4.64	$ 714,266
2957			37020	1953	$ 63,382	4.45	$ 282,305
2958			37020	1954	$ 182,807	4.34	$ 792,519
2959			37020	1955	$ 214,629	4.52	$ 969,244
2960			37020	1956	$ 236,753	4.34	$ 1,026,389
2961			37020	1957	$ 189,180	4.12	$ 778,620
2962			37020	1958	$ 274,744	4.01	$ 1,102,860
2963			37020	1959	$ 291,613	3.92	$ 1,142,370
2964			37020	1960	$ 202,241	3.87	$ 782,830
2965			37020	1961	$ 144,576	3.92	$ 566,364
2966			37020	1962	$ 236,384	3.92	$ 926,013
2967			37020	1963	$ 212,699	3.92	$ 833,228
2968			37020	1964	$ 243,732	3.92	$ 954,798
2969			37020	1965	$ 263,589	3.92	$ 1,032,585
2970			37020	1966	$ 193,159	3.92	$ 756,682
2971			37020	1967	$ 238,818	3.87	$ 924,410
2972			37020	1968	$ 293,181	3.74	$ 1,095,707
2973			37020	1969	$ 269,255	3.57	$ 962,057
2974			37020	1970	$ 370,524	3.42	$ 1,268,150
2975			37020	1971	$ 436,872	3.25	$ 1,420,467
2976			37020	1972	$ 351,884	3.22	$ 1,132,807
2977			37020	1973	$ 476,904	3.25	$ 1,550,631

Reproduction Cost New by Vintage Year

(a)		(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
2978			37020	1974	$	659,077	3.01	$	1,984,219
2979			37020	1975	$	403,822	2.62	$	1,058,878
2980			37020	1976	$	627,188	2.44	$	1,533,288
2981			37020	1977	$	564,227	2.32	$	1,310,399
2982			37020	1978	$	390,907	2.26	$	882,650
2983			37020	1979	$	659,219	2.20	$	1,448,257
2984			37020	1980	$	19,481	2.23	$	43,386
2985			37020	1981	$	1,696,060	1.99	$	3,383,227
2986			37020	1982	$	1,050,588	1.71	$	1,797,861
2987			37020	1983	$	1,402,846	1.60	$	2,246,940
2988			37020	1984	$	682,073	1.59	$	1,087,121
2989			37020	1985	$	789,890	1.58	$	1,246,743
2990			37020	1986	$	1,394,264	1.54	$	2,148,523
2991			37020	1987	$	1,368,998	1.54	$	2,109,589
2992			37020	1988	$	2,054,254	1.65	$	3,381,929
2993			37020	1989	$	2,107,154	1.73	$	3,644,315
2994			37020	1990	$	1,634,654	1.72	$	2,819,629
2995			37020	1991	$	1,703,566	1.60	$	2,731,968
2996			37020	1992	$	1,066,747	1.61	$	1,714,945
2997			37020	1993	$	1,841,318	1.59	$	2,920,467
2998			37020	1994	$	2,084,851	1.67	$	3,480,767
2999			37020	1995	$	2,273,962	1.69	$	3,850,874
3000			37020	1996	$	990,067	1.66	$	1,640,335
3001			37020	1997	$	1,880,354	1.54	$	2,904,457
3002			37020	1998	$	1,757,363	1.50	$	2,636,209
3003			37020	1999	$	2,302,220	1.55	$	3,577,329
3004			37020	2000	$	2,749,057	1.57	$	4,323,303
3005			37020	2001	$	2,324,005	1.38	$	3,208,659
3006			37020	2002	$	1,606,970	1.21	$	1,938,771
3007			37020	2003	$	2,109,353	1.12	$	2,354,837
3008			37020	2004	$	2,839,419	1.03	$	2,923,907
3009			37020	2005	$	2,149,186	1.06	$	2,276,214
3010			37020	2006	$	1,852,599	1.03	$	1,910,750
3011			37020	2007	$	2,551,861	1.00	$	2,551,861
3012			37020	Total	$	57,896,041		$	104,102,841
3013									
3014		Installs Customer Premises	37100	1965	$	6,524	3.92	$	25,556
3015			37100	1966	$	10,263	3.92	$	40,203
3016			37100	1967	$	12,033	3.87	$	46,578
3017			37100	1968	$	15,183	3.74	$	56,744
3018			37100	1969	$	20,936	3.57	$	74,804
3019			37100	1970	$	23,512	3.42	$	80,471
3020			37100	1971	$	2,586	3.25	$	8,407
3021			37100	1972	$	2,152	3.22	$	6,929
3022			37100	1973	$	17,744	3.25	$	57,693
3023			37100	1974	$	1,588	3.01	$	4,781
3024			37100	1975	$	18,178	2.62	$	47,666
3025			37100	1976	$	5,809	2.44	$	14,200
3026			37100	1977	$	13,084	2.32	$	30,388
3027			37100	1978	$	11,088	2.26	$	25,037
3028			37100	1979	$	27,260	2.20	$	59,889
3029			37100	1980	$	22,983	2.23	$	51,184
3030			37100	1981	$	25,347	1.99	$	50,561
3031			37100	1982	$	6,741	1.71	$	11,535
3032			37100	1983	$	3,753	1.60	$	6,011
3033			37100	1984	$	48,335	1.59	$	77,038
3034			37100	1985	$	2,003	1.58	$	3,162
3035			37100	1986	$	42,242	1.54	$	65,094
3036			37100	1987	$	15,048	1.54	$	23,188
3037			37100	1988	$	7,461	1.65	$	12,283
3038			37100	1989	$	5,851	1.73	$	10,119
3039			37100	1990	$	5,150	1.72	$	8,883
3040			37100	1991	$	18,979	1.60	$	30,436
3041			37100	1992	$	423,404	1.61	$	680,682
3042			37100	1993	$	518,288	1.59	$	822,043
3043			37100	1994	$	382,182	1.67	$	638,073
3044			37100	1995	$	420,169	1.69	$	711,542
3045			37100	1996	$	382,024	1.66	$	632,933
3046			37100	1997	$	434,471	1.54	$	671,098
3047			37100	1998	$	449,601	1.50	$	674,444
3048			37100	1999	$	398,302	1.55	$	618,906

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
3049			37100	2000	$	409,378	1.57	$	643,807
3050			37100	2001	$	360,952	1.38	$	498,352
3051			37100	2002	$	438,839	1.21	$	529,448
3052			37100	2003	$	420,214	1.12	$	469,117
3053			37100	2004	$	443,860	1.03	$	457,067
3054			37100	2005	$	474,476	1.06	$	502,520
3055			37100	2006	$	545,770	1.03	$	562,901
3056			37100	2007	$	403,747	1.00	$	403,747
3057			37100	Total	$	7,297,508		$	10,445,522
3058									
3059		Street Lighting & Signal Sys	37300	1936	$	26	6.77	$	178
3060			37300	1941	$	83	6.64	$	554
3061			37300	1944	$	11	6.64	$	75
3062			37300	1945	$	447	6.64	$	2,963
3063			37300	1946	$	1,000	5.91	$	5,913
3064			37300	1947	$	6,314	5.24	$	33,112
3065			37300	1948	$	13,417	5.00	$	67,117
3066			37300	1949	$	20,522	4.58	$	93,980
3067			37300	1950	$	24,357	4.58	$	111,544
3068			37300	1951	$	52,332	4.58	$	239,654
3069			37300	1952	$	36,798	4.64	$	170,924
3070			37300	1953	$	95,832	4.45	$	426,841
3071			37300	1954	$	55,848	4.34	$	242,115
3072			37300	1955	$	125,153	4.52	$	565,178
3073			37300	1956	$	177,709	4.34	$	770,416
3074			37300	1957	$	173,112	4.12	$	712,488
3075			37300	1958	$	230,477	4.01	$	925,169
3076			37300	1959	$	388,050	3.92	$	1,520,152
3077			37300	1960	$	496,302	3.87	$	1,921,075
3078			37300	1961	$	193,550	3.92	$	758,217
3079			37300	1962	$	147,179	3.92	$	576,560
3080			37300	1963	$	241,191	3.92	$	944,844
3081			37300	1964	$	382,591	3.92	$	1,498,766
3082			37300	1965	$	193,168	3.92	$	756,718
3083			37300	1966	$	274,234	3.92	$	1,074,289
3084			37300	1967	$	628,567	3.87	$	2,433,042
3085			37300	1968	$	377,301	3.74	$	1,410,089
3086			37300	1969	$	608,676	3.57	$	2,174,813
3087			37300	1970	$	270,012	3.42	$	924,138
3088			37300	1971	$	658,878	3.25	$	2,142,309
3089			37300	1972	$	240,537	3.22	$	774,350
3090			37300	1973	$	537,918	3.25	$	1,749,015
3091			37300	1974	$	243,443	3.01	$	732,912
3092			37300	1975	$	380,421	2.62	$	997,518
3093			37300	1976	$	452,142	2.44	$	1,105,351
3094			37300	1977	$	478,374	2.32	$	1,111,008
3095			37300	1978	$	664,081	2.26	$	1,499,464
3096			37300	1979	$	870,606	2.20	$	1,912,659
3097			37300	1980	$	208,521	2.23	$	464,380
3098			37300	1981	$	369,331	1.99	$	736,725
3099			37300	1982	$	318,544	1.71	$	545,121
3100			37300	1983	$	411,873	1.60	$	659,697
3101			37300	1984	$	769,483	1.59	$	1,226,441
3102			37300	1985	$	2,331,476	1.58	$	3,679,943
3103			37300	1986	$	2,219,977	1.54	$	3,420,925
3104			37300	1987	$	759,198	1.54	$	1,169,904
3105			37300	1988	$	1,609,640	1.65	$	2,649,959
3106			37300	1989	$	1,147,626	1.73	$	1,984,816
3107			37300	1990	$	682,433	1.72	$	1,177,134
3108			37300	1991	$	632,408	1.60	$	1,014,177
3109			37300	1992	$	484,613	1.61	$	779,083
3110			37300	1993	$	378,928	1.59	$	601,007
3111			37300	1994	$	361,982	1.67	$	604,347
3112			37300	1995	$	529,526	1.69	$	896,734
3113			37300	1996	$	509,805	1.66	$	844,640
3114			37300	1997	$	565,891	1.54	$	874,093
3115			37300	1998	$	608,221	1.50	$	912,389
3116			37300	1999	$	272,067	1.55	$	422,754
3117			37300	2000	$	279,539	1.57	$	439,617
3118			37300	2001	$	1,009,223	1.38	$	1,393,393
3119			37300	2002	$	961,029	1.21	$	1,159,459

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost		Adjustment Factor	Reproduction Cost	
3120			37300	2003	$	1,357,785	1.12	$	1,515,802
3121			37300	2004	$	833,472	1.03	$	858,273
3122			37300	2005	$	2,313,480	1.06	$	2,450,218
3123			37300	2006	$	1,563,597	1.03	$	1,612,677
3124			37300	2007	$	1,133,904	1.00	$	1,133,904
3125			37300	Total	$	34,364,231		$	67,613,124
3126									
3127		Land	38910	1929	$	1,106	54.79	$	60,603
3128			38910	1955	$	124	20.20	$	2,510
3129			38910	1961	$	5,645	15.63	$	88,208
3130			38910	1964	$	5,842	13.42	$	78,420
3131			38910	1967	$	1,528	10.18	$	15,547
3132			38910	1972	$	2,606	9.20	$	23,963
3133			38910	1977	$	6,406	3.37	$	21,569
3134			38910	2002	$	17,955	1.63	$	29,195
3135			38910	2005	$	54,678	1.27	$	69,654
3136			38910	Total	$	95,891		$	389,668
3137									
3138		Land Rights	38920	1985	$	10	2.98	$	28
3139			38920	2003	$	97,594	1.56	$	151,898
3140			38920	2004	$	2,222	1.44	$	3,209
3141			38920	2005	$	4,416	1.27	$	5,626
3142			38920	Total	$	104,242		$	160,761
3143									
3144		Structures & Improvemts	39000	1946	$	479	21.27	$	10,199
3145			39000	1947	$	13,778	17.60	$	242,545
3146			39000	1948	$	7,758	14.18	$	110,021
3147			39000	1949	$	3,061	13.43	$	41,117
3148			39000	1950	$	53,806	12.76	$	686,722
3149			39000	1951	$	8,075	12.45	$	100,548
3150			39000	1952	$	6,826	12.16	$	82,972
3151			39000	1953	$	19,841	11.10	$	220,196
3152			39000	1954	$	104,423	11.10	$	1,158,906
3153			39000	1955	$	67,281	10.42	$	700,975
3154			39000	1956	$	7,024	8.80	$	61,821
3155			39000	1957	$	13,569	7.98	$	108,239
3156			39000	1958	$	17,454	7.85	$	137,086
3157			39000	1959	$	3,354	7.74	$	25,941
3158			39000	1960	$	31,934	7.98	$	254,733
3159			39000	1961	$	17,355	8.51	$	147,666
3160			39000	1962	$	35,004	8.51	$	297,830
3161			39000	1963	$	6,854	8.37	$	57,358
3162			39000	1964	$	285,611	8.37	$	2,390,310
3163			39000	1965	$	148,588	8.23	$	1,223,492
3164			39000	1966	$	3,654	8.10	$	29,613
3165			39000	1967	$	47,485	7.98	$	378,778
3166			39000	1968	$	83,687	7.51	$	628,284
3167			39000	1969	$	12,097	7.09	$	85,775
3168			39000	1970	$	8,214	6.72	$	55,173
3169			39000	1971	$	12,940	6.15	$	79,589
3170			39000	1972	$	14,291	5.74	$	81,977
3171			39000	1973	$	5,465	5.11	$	27,899
3172			39000	1974	$	13,282	3.65	$	48,522
3173			39000	1975	$	56,061	3.17	$	177,488
3174			39000	1976	$	44,448	3.36	$	149,287
3175			39000	1977	$	15,337	3.33	$	51,092
3176			39000	1978	$	1,357,352	3.02	$	4,094,230
3177			39000	1979	$	81,772	2.64	$	215,741
3178			39000	1980	$	25,640	2.27	$	58,305
3179			39000	1981	$	2,076,565	2.26	$	4,685,601
3180			39000	1982	$	10,938	2.53	$	27,711
3181			39000	1983	$	103,359	2.55	$	263,502
3182			39000	1984	$	53,373	2.30	$	122,600
3183			39000	1985	$	3,536,273	2.16	$	7,641,564
3184			39000	1986	$	542,587	2.09	$	1,135,240
3185			39000	1987	$	363,543	2.03	$	738,682
3186			39000	1988	$	251,718	1.91	$	479,947
3187			39000	1989	$	457,753	1.83	$	838,349
3188			39000	1990	$	49,862	1.84	$	91,565
3189			39000	1991	$	215,179	2.03	$	437,223
3190			39000	1992	$	262,653	2.05	$	538,508

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
3191			39000	1993	$ 13,948	1.91	$ 26,670
3192			39000	1994	$ 149,482	1.74	$ 260,232
3193			39000	1995	$ 72,714	1.67	$ 121,512
3194			39000	1996	$ 286,794	1.60	$ 458,974
3195			39000	1997	$ 4,739	1.59	$ 7,514
3196			39000	1998	$ 224,008	1.58	$ 353,506
3197			39000	1999	$ 1,303,276	1.54	$ 2,005,551
3198			39000	2000	$ 229,559	1.46	$ 334,599
3199			39000	2001	$ 8,664	1.41	$ 12,228
3200			39000	2002	$ 49,568	1.41	$ 69,664
3201			39000	2003	$ 396,763	1.36	$ 541,225
3202			39000	2004	$ 162,251	1.21	$ 196,516
3203			39000	2005	$ 242,837	1.16	$ 282,879
3204			39000	2006	$ 260,214	1.12	$ 290,526
3205			39000	2007	$ 709,130	1.00	$ 709,130
3206			39000	Total	$ 14,671,554		$ 36,891,649
3207							
3208		Office Furniture & Eq	39110	1953	$ 132	6.80	$ 897
3209			39110	1970	$ 1,019	4.51	$ 4,593
3210			39110	1971	$ 563	4.29	$ 2,416
3211			39110	1975	$ 386	3.26	$ 1,259
3212			39110	1976	$ 54,219	3.09	$ 167,350
3213			39110	1977	$ 17,098	2.90	$ 49,618
3214			39110	1978	$ 14,790	2.71	$ 40,102
3215			39110	1979	$ 102,890	2.50	$ 257,634
3216			39110	1980	$ 216,332	2.30	$ 496,635
3217			39110	1981	$ 207,901	2.10	$ 436,301
3218			39110	1982	$ 178,794	1.98	$ 353,640
3219			39110	1983	$ 649,142	1.90	$ 1,235,099
3220			39110	1984	$ 106,602	1.83	$ 195,489
3221			39110	1985	$ 196,605	1.78	$ 349,895
3222			39110	1986	$ 796,405	1.74	$ 1,386,774
3223			39110	1987	$ 228,443	1.69	$ 387,210
3224			39110	1988	$ 160,694	1.64	$ 263,387
3225			39110	1989	$ 21,257	1.58	$ 33,572
3226			39110	1990	$ 45,249	1.52	$ 68,806
3227			39110	1991	$ 89,867	1.47	$ 132,035
3228			39110	1992	$ 215,587	1.44	$ 309,629
3229			39110	1993	$ 249,764	1.40	$ 350,613
3230			39110	1996	$ 216,184	1.32	$ 285,783
3231			39110	1997	$ 167,099	1.30	$ 217,280
3232			39110	1998	$ 34,268	1.29	$ 44,070
3233			39110	1999	$ 238,912	1.27	$ 302,868
3234			39110	2000	$ 16,197	1.24	$ 20,095
3235			39110	2001	$ 138,119	1.21	$ 167,346
3236			39110	2002	$ 182,144	1.19	$ 216,899
3237			39110	2003	$ 143,451	1.17	$ 167,264
3238			39110	2004	$ 59,116	1.11	$ 65,584
3239			39110	2005	$ 238,745	1.05	$ 249,665
3240			39110	2006	$ 92,098	1.02	$ 94,364
3241			39110	2007	$ 538,997	1.00	$ 538,997
3242			39110	Total	$ 5,619,068		$ 8,893,168
3243							
3244		Computer Equipment	39120	1977	$ 2,277	2.90	$ 6,608
3245			39120	1982	$ 5,755	1.98	$ 11,382
3246			39120	1983	$ 1,639	1.90	$ 3,118
3247			39120	1984	$ 93,531	1.83	$ 171,519
3248			39120	1985	$ 1,346,354	1.78	$ 2,396,084
3249			39120	1986	$ 461,323	1.74	$ 803,299
3250			39120	1987	$ 98,712	1.69	$ 167,316
3251			39120	1988	$ 99,818	1.64	$ 163,607
3252			39120	1989	$ 367,389	1.58	$ 580,233
3253			39120	1990	$ 368,748	1.52	$ 560,723
3254			39120	1991	$ 608,377	1.47	$ 893,841
3255			39120	1992	$ 612,273	1.44	$ 879,354
3256			39120	1993	$ 386,982	1.40	$ 543,236
3257			39120	1994	$ 345,123	1.37	$ 474,395
3258			39120	1995	$ 619,752	1.35	$ 834,808
3259			39120	1996	$ 1,132,626	1.32	$ 1,497,268
3260			39120	1997	$ 11,325,002	1.30	$ 14,725,929
3261			39120	1998	$ 916,065	1.29	$ 1,178,099

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year	Original Cost	Adjustment Factor	Reproduction Cost
3262			39120	1999	$ 1,605,034	1.27	$ 2,034,698
3263			39120	2000	$ 1,440,125	1.24	$ 1,786,721
3264			39120	2001	$ 1,351,158	1.21	$ 1,637,068
3265			39120	2002	$ 2,935,665	1.19	$ 3,495,823
3266			39120	2003	$ 2,380,368	1.17	$ 2,775,509
3267			39120	2004	$ 2,392,784	1.11	$ 2,654,602
3268			39120	2005	$ 1,526,431	1.05	$ 1,596,250
3269			39120	2006	$ 1,971,595	1.02	$ 2,020,105
3270			39120	2007	$ 96,180	1.00	$ 96,180
3271			39120	Total	$ 34,491,085		$ 43,987,775
3272							
3273		Trns Eq - Autos	39210	1968	$ (125)	4.48	$ (560)
3274			39210	1969	$ 54,686	4.27	$ 233,430
3275			39210	1970	$ (36,766)	4.05	$ (149,044)
3276			39210	1971	$ (2)	3.86	$ (7)
3277			39210	1972	$ 39,987	3.70	$ 147,957
3278			39210	1973	$ (5,287)	3.50	$ (18,528)
3279			39210	1974	$ (11,463)	3.21	$ (36,846)
3280			39210	1975	$ 52,577	2.94	$ 154,425
3281			39210	1976	$ 2,972	2.78	$ 8,253
3282			39210	1977	$ (6,827)	2.61	$ (17,825)
3283			39210	1978	$ (398)	2.44	$ (970)
3284			39210	1979	$ (57)	2.25	$ (129)
3285			39210	1980	$ (34,927)	2.07	$ (72,136)
3286			39210	1981	$ 34,337	1.89	$ 64,828
3287			39210	1982	$ (1,456)	1.78	$ (2,591)
3288			39210	1983	$ (20,598)	1.71	$ (35,259)
3289			39210	1984	$ (52,577)	1.65	$ (86,742)
3290			39210	1987	$ 3,591	1.52	$ 5,477
3291			39210	1990	$ (565)	1.37	$ (773)
3292			39210	1994	$ 38,318	1.24	$ 47,386
3293			39210	1996	$ 47,645	1.19	$ 56,664
3294			39210	1998	$ 10,585	1.16	$ 12,247
3295			39210	Total	$ 113,650		$ 309,257
3296							
3297		Trns Eq - Trailers	39220	1968	$ 68	4.48	$ 303
3298			39220	1970	$ (0)	4.05	$ (1)
3299			39220	1980	$ 235	2.07	$ 484
3300			39220	1983	$ 220,936	1.71	$ 378,186
3301			39220	1984	$ 15,143	1.65	$ 24,983
3302			39220	1985	$ 132,810	1.60	$ 212,643
3303			39220	1986	$ 85,757	1.57	$ 134,344
3304			39220	1987	$ 95,373	1.52	$ 145,437
3305			39220	1989	$ 507	1.42	$ 721
3306			39220	1990	$ 9,372	1.37	$ 12,821
3307			39220	1992	$ 24,318	1.29	$ 31,421
3308			39220	1994	$ 159,661	1.24	$ 197,443
3309			39220	1995	$ 196,133	1.21	$ 237,681
3310			39220	1996	$ 505,601	1.19	$ 601,309
3311			39220	1997	$ 255,339	1.17	$ 298,702
3312			39220	1998	$ 165,928	1.16	$ 191,978
3313			39220	1999	$ 387,676	1.14	$ 442,142
3314			39220	2000	$ 73,479	1.12	$ 82,015
3315			39220	Total	$ 2,328,334		$ 2,992,612
3316							
3317		Trns Eq - Truck < 13000	39230	1968	$ 125	4.48	$ 560
3318			39230	1971	$ 7,035	3.86	$ 27,161
3319			39230	1972	$ (65,151)	3.70	$ (241,066)
3320			39230	1973	$ 41,297	3.50	$ 144,729
3321			39230	1974	$ 11,264	3.21	$ 36,205
3322			39230	1976	$ 5,188	2.78	$ 14,407
3323			39230	1977	$ 28,424	2.61	$ 74,211
3324			39230	1978	$ 240	2.44	$ 584
3325			39230	1979	$ 22,169	2.25	$ 49,940
3326			39230	1980	$ 76,077	2.07	$ 157,126
3327			39230	1981	$ (17,908)	1.89	$ (33,811)
3328			39230	1982	$ 96,500	1.78	$ 171,716
3329			39230	1983	$ 20,598	1.71	$ 35,259
3330			39230	1985	$ 59,446	1.60	$ 95,179
3331			39230	1986	$ 44,111	1.57	$ 69,102
3332			39230	1987	$ 58,338	1.52	$ 88,961

Reproduction Cost New by Vintage Year

Line No.	(a) Plant	(b) FERC Account	(c) FERC Account	(d) Installation Year	(e) Original Cost	(f) Adjustment Factor	(g) Reproduction Cost
3333			39230	1988	$ 26,453	1.47	$ 39,008
3334			39230	1991	$ 132,826	1.32	$ 175,569
3335			39230	1992	$ 131,693	1.29	$ 170,160
3336			39230	1993	$ 35,100	1.26	$ 44,328
3337			39230	1994	$ 198,749	1.24	$ 245,781
3338			39230	1995	$ 835,875	1.21	$ 1,012,948
3339			39230	1996	$ 927,539	1.19	$ 1,103,119
3340			39230	1997	$ 293,608	1.17	$ 343,471
3341			39230	1998	$ 390,045	1.16	$ 451,280
3342			39230	1999	$ 17,634	1.14	$ 20,112
3343			39230	2000	$ 291,279	1.12	$ 325,119
3344			39230	2003	$ 1	1.05	$ 1
3345			39230	Total	$ 3,668,555		$ 4,621,159
3346							
3347		Trns Eq - Truck > 13000	39240	1983	$ 54,218	1.71	$ 92,808
3348			39240	1987	$ (83,091)	1.52	$ (126,707)
3349			39240	1991	$ 17,303	1.32	$ 22,871
3350			39240	1992	$ 38,830	1.29	$ 50,172
3351			39240	1993	$ 265,264	1.26	$ 335,006
3352			39240	1994	$ 357,622	1.24	$ 442,249
3353			39240	1995	$ 80,129	1.21	$ 97,103
3354			39240	1996	$ 57,811	1.19	$ 68,754
3355			39240	1997	$ 1,180,369	1.17	$ 1,380,827
3356			39240	1999	$ 243,242	1.14	$ 277,416
3357			39240	2000	$ 113,929	1.12	$ 127,165
3358			39240	Total	$ 2,325,626		$ 2,767,665
3359							
3360		Stores Equipment	39300	1950	$ 61	12.66	$ 777
3361			39300	1951	$ 1,004	11.53	$ 11,582
3362			39300	1958	$ 454	9.11	$ 4,131
3363			39300	1960	$ 1,654	8.80	$ 14,552
3364			39300	1961	$ 4,550	8.80	$ 40,025
3365			39300	1962	$ 18,176	8.80	$ 159,888
3366			39300	1963	$ 1,311	8.80	$ 11,529
3367			39300	1967	$ 6,112	7.63	$ 46,649
3368			39300	1968	$ 28,455	7.31	$ 208,000
3369			39300	1970	$ 31,433	6.11	$ 191,928
3370			39300	1971	$ 1,338	5.70	$ 7,634
3371			39300	1972	$ 15,054	5.46	$ 82,244
3372			39300	1973	$ 1,582	5.19	$ 8,209
3373			39300	1974	$ 47,047	4.36	$ 205,188
3374			39300	1975	$ 5,238	3.76	$ 19,699
3375			39300	1976	$ 116,654	3.60	$ 420,440
3376			39300	1977	$ 41,877	3.37	$ 141,131
3377			39300	1978	$ 2,772	3.20	$ 8,881
3378			39300	1979	$ 48,920	2.92	$ 142,638
3379			39300	1980	$ 26,851	2.72	$ 72,961
3380			39300	1981	$ 20,696	2.46	$ 50,906
3381			39300	1982	$ 10,126	2.32	$ 23,463
3382			39300	1983	$ 525,486	2.27	$ 1,190,949
3383			39300	1984	$ 55,564	2.24	$ 124,301
3384			39300	1985	$ 87,724	2.21	$ 193,740
3385			39300	1986	$ 115,195	2.18	$ 251,202
3386			39300	1987	$ 13,724	2.16	$ 29,679
3387			39300	1988	$ 1,829	2.04	$ 3,726
3388			39300	1989	$ 9,101	1.94	$ 17,658
3389			39300	1991	$ 3,677	1.86	$ 6,827
3390			39300	1992	$ 86,427	1.84	$ 158,641
3391			39300	1993	$ 26,083	1.80	$ 46,923
3392			39300	1994	$ 122,733	1.74	$ 213,575
3393			39300	1995	$ 55,243	1.68	$ 92,713
3394			39300	1996	$ 155,585	1.66	$ 257,983
3395			39300	1997	$ 18,367	1.63	$ 30,024
3396			39300	1998	$ 3,190	1.60	$ 5,101
3397			39300	1999	$ 196,557	1.59	$ 313,405
3398			39300	2000	$ 41,563	1.56	$ 64,633
3399			39300	2002	$ 50,359	1.44	$ 72,753
3400			39300	Total	$ 1,999,776		$ 4,946,285
3401							
3402		Tools, Shop & Garage Eq	39400	1953	$ (7,888)	6.04	$ (47,684)
3403			39400	1967	$ 38,019	4.62	$ 175,476

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
3404			39400	1969	$	83,903	4.22	$	353,844
3405			39400	1971	$	24,010	3.81	$	91,582
3406			39400	1972	$	103,279	3.66	$	377,555
3407			39400	1973	$	23,969	3.46	$	82,992
3408			39400	1974	$	100,353	3.18	$	318,695
3409			39400	1975	$	62,634	2.90	$	181,756
3410			39400	1976	$	107,929	2.74	$	296,103
3411			39400	1977	$	8,445	2.58	$	21,785
3412			39400	1978	$	265,187	2.41	$	639,121
3413			39400	1979	$	514,653	2.23	$	1,145,448
3414			39400	1980	$	740,809	2.04	$	1,511,660
3415			39400	1981	$	671,194	1.87	$	1,252,012
3416			39400	1982	$	636,843	1.76	$	1,119,624
3417			39400	1983	$	907,869	1.69	$	1,535,382
3418			39400	1984	$	640,612	1.63	$	1,044,198
3419			39400	1985	$	1,035,476	1.59	$	1,649,878
3420			39400	1986	$	1,536,702	1.55	$	2,381,011
3421			39400	1987	$	620,153	1.50	$	931,658
3422			39400	1988	$	609,106	1.45	$	881,743
3423			39400	1989	$	827,957	1.39	$	1,148,571
3424			39400	1990	$	533,811	1.34	$	715,553
3425			39400	1991	$	615,778	1.30	$	799,138
3426			39400	1992	$	638,917	1.27	$	811,086
3427			39400	1993	$	652,725	1.23	$	805,407
3428			39400	1994	$	315,130	1.21	$	382,758
3429			39400	1995	$	518,984	1.19	$	616,128
3430			39400	1996	$	649,776	1.16	$	753,833
3431			39400	1997	$	471,455	1.14	$	537,393
3432			39400	1998	$	308,949	1.12	$	346,346
3433			39400	1999	$	601,247	1.11	$	665,783
3434			39400	2000	$	269,538	1.10	$	295,459
3435			39400	2001	$	612,377	1.09	$	665,894
3436			39400	2002	$	585,981	1.09	$	638,469
3437			39400	2003	$	1,296,585	1.09	$	1,408,017
3438			39400	2004	$	416,523	1.07	$	443,747
3439			39400	2005	$	544,767	1.05	$	569,577
3440			39400	2006	$	384,405	1.03	$	394,324
3441			39400	2007	$	910,432	1.00	$	910,432
3442			39400	Total	$	19,878,594		$	28,851,754
3443									
3444		Laboratory Equipment	39500	1956	$	14	6.91	$	100
3445			39500	1967	$	14	5.61	$	81
3446			39500	1968	$	6,023	5.38	$	32,397
3447			39500	1969	$	1,592	5.12	$	8,161
3448			39500	1970	$	3,174	4.87	$	15,447
3449			39500	1971	$	1,214	4.64	$	5,626
3450			39500	1972	$	1,318	4.44	$	5,853
3451			39500	1973	$	1,035	4.21	$	4,357
3452			39500	1974	$	4,955	3.86	$	19,123
3453			39500	1975	$	109	3.53	$	384
3454			39500	1976	$	70,897	3.33	$	236,370
3455			39500	1977	$	220,682	3.13	$	691,762
3456			39500	1978	$	232,027	2.93	$	679,558
3457			39500	1979	$	293,872	2.70	$	794,836
3458			39500	1980	$	1,063,808	2.48	$	2,637,968
3459			39500	1981	$	682,675	2.27	$	1,547,506
3460			39500	1982	$	1,139,183	2.14	$	2,433,838
3461			39500	1983	$	553,460	2.06	$	1,137,463
3462			39500	1984	$	850,898	1.98	$	1,685,479
3463			39500	1985	$	1,229,955	1.92	$	2,364,400
3464			39500	1986	$	1,324,763	1.88	$	2,491,719
3465			39500	1987	$	402,776	1.83	$	737,433
3466			39500	1988	$	456,882	1.77	$	808,888
3467			39500	1989	$	558,252	1.71	$	952,351
3468			39500	1990	$	744,668	1.64	$	1,223,127
3469			39500	1991	$	422,214	1.59	$	670,053
3470			39500	1992	$	1,324,197	1.53	$	2,020,673
3471			39500	1993	$	452,087	1.47	$	663,702
3472			39500	1994	$	371,926	1.43	$	533,195
3473			39500	1995	$	301,550	1.39	$	420,527
3474			39500	1996	$	495,728	1.36	$	675,296

Reproduction Cost New by Vintage Year

Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
	(a)	(b)	(c)	(d)		(e)	(f)		(g)
3475			39500	1997	$	763,248	1.33	$	1,014,468
3476			39500	1998	$	227,523	1.30	$	295,000
3477			39500	1999	$	285,541	1.27	$	362,813
3478			39500	2000	$	45,643	1.25	$	56,991
3479			39500	2001	$	842,769	1.23	$	1,033,598
3480			39500	2002	$	238,519	1.20	$	285,252
3481			39500	2003	$	383,490	1.16	$	443,262
3482			39500	2004	$	385,792	1.12	$	433,607
3483			39500	2005	$	563,326	1.07	$	603,645
3484			39500	2006	$	253,365	1.04	$	263,666
3485			39500	2007	$	97,642	1.00	$	97,642
3486			39500	Total	$	17,298,805		$	30,387,613
3487									
3488		Power Operated Equip	39600	1962	$	21,879	6.03	$	131,902
3489			39600	1965	$	(0)	5.77	$	(0)
3490			39600	1966	$	12,450	5.61	$	69,852
3491			39600	1967	$	2,501	5.44	$	13,609
3492			39600	1968	$	12,629	5.22	$	65,915
3493			39600	1969	$	39,281	4.97	$	195,333
3494			39600	1971	$	39,962	4.50	$	179,738
3495			39600	1972	$	167,332	4.31	$	721,299
3496			39600	1973	$	30,899	4.08	$	126,152
3497			39600	1974	$	121,553	3.74	$	455,173
3498			39600	1976	$	30,180	3.23	$	97,631
3499			39600	1977	$	167,739	3.04	$	510,187
3500			39600	1978	$	30,050	2.84	$	85,396
3501			39600	1979	$	321,296	2.62	$	843,204
3502			39600	1980	$	140,504	2.41	$	338,068
3503			39600	1981	$	272,589	2.20	$	599,563
3504			39600	1983	$	255,740	1.99	$	509,986
3505			39600	1984	$	16,217	1.92	$	31,169
3506			39600	1985	$	698,186	1.88	$	1,311,744
3507			39600	1986	$	1,173,652	1.84	$	2,158,621
3508			39600	1987	$	931,760	1.81	$	1,684,707
3509			39600	1988	$	1,125,464	1.75	$	1,966,493
3510			39600	1989	$	192,216	1.67	$	320,972
3511			39600	1991	$	363,526	1.57	$	569,899
3512			39600	1992	$	665,707	1.54	$	1,024,411
3513			39600	1993	$	551,089	1.50	$	826,849
3514			39600	1994	$	924,084	1.45	$	1,338,424
3515			39600	1995	$	2,722,080	1.40	$	3,813,293
3516			39600	1996	$	709,853	1.36	$	966,245
3517			39600	1997	$	8,055,233	1.33	$	10,744,037
3518			39600	1998	$	3,790,904	1.31	$	4,956,542
3519			39600	1999	$	1,660,251	1.27	$	2,114,647
3520			39600	2000	$	3,515,153	1.26	$	4,438,978
3521			39600	2002	$	18,748	1.22	$	22,835
3522			39600	2003	$	44,233	1.20	$	53,168
3523			39600	2004	$	33,206	1.14	$	37,900
3524			39600	Total	$	28,858,146		$	43,323,942
3525									
3526		Communication Equip	39700	1953	$	3,177	3.66	$	11,630
3527			39700	1955	$	(519)	3.56	$	(1,850)
3528			39700	1971	$	17,560	2.31	$	40,564
3529			39700	1972	$	45,455	2.21	$	100,634
3530			39700	1973	$	30,884	2.10	$	64,761
3531			39700	1974	$	151,200	1.92	$	290,797
3532			39700	1975	$	928,833	1.76	$	1,632,339
3533			39700	1976	$	260,976	1.66	$	433,607
3534			39700	1979	$	0	1.35	$	0
3535			39700	1980	$	53,873	1.24	$	66,575
3536			39700	1981	$	116,046	1.13	$	131,094
3537			39700	1982	$	69,170	1.06	$	73,646
3538			39700	1983	$	61,223	1.02	$	62,705
3539			39700	1984	$	446,867	0.99	$	441,120
3540			39700	1985	$	637,214	0.96	$	610,451
3541			39700	1986	$	651,062	0.94	$	612,087
3542			39700	1987	$	125,999	0.93	$	116,625
3543			39700	1988	$	606,992	0.92	$	559,671
3544			39700	1989	$	603,689	0.91	$	546,630
3545			39700	1990	$	38,591	0.89	$	34,391

Reproduction Cost New by Vintage Year

	(a)	(b)	(c)	(d)		(e)	(f)		(g)
Line No.	Plant	FERC Account	FERC Account	Installation Year		Original Cost	Adjustment Factor		Reproduction Cost
3546			39700	1992	$	220,555	0.87	$	192,608
3547			39700	1993	$	72,784	0.86	$	62,424
3548			39700	1994	$	34,546	0.85	$	29,210
3549			39700	1995	$	1,387,167	0.84	$	1,166,730
3550			39700	1996	$	854,815	0.83	$	712,098
3551			39700	1997	$	362,927	0.83	$	300,505
3552			39700	1998	$	577,484	0.83	$	481,070
3553			39700	1999	$	4,318,683	0.85	$	3,661,326
3554			39700	2000	$	337,865	0.87	$	293,184
3555			39700	2001	$	1,556,502	0.88	$	1,373,047
3556			39700	2002	$	1,885,094	0.91	$	1,719,924
3557			39700	2003	$	277,719	0.94	$	261,608
3558			39700	2004	$	891,308	0.97	$	867,758
3559			39700	2005	$	561,923	0.99	$	554,971
3560			39700	2006	$	887,669	1.00	$	886,743
3561			39700	2007	$	122,987	1.00	$	122,987
3562			39700	Total	$	19,198,321		$	18,513,672
3563									
3564		Miscellaneous Equip	39800	1986	$	776	1.59	$	1,238
3565			39800	1987	$	17,423	1.55	$	27,050
3566			39800	1988	$	6,568	1.50	$	9,861
3567			39800	1989	$	22,361	1.45	$	32,348
3568			39800	1990	$	74,881	1.39	$	104,295
3569			39800	1991	$	7,861	1.35	$	10,578
3570			39800	1992	$	94,782	1.32	$	124,686
3571			39800	1993	$	2,428	1.29	$	3,122
3572			39800	1998	$	38,672	1.18	$	45,554
3573			39800	1999	$	389,672	1.16	$	452,468
3574			39800	2000	$	4,739	1.14	$	5,385
3575			39800	2001	$	22,390	1.11	$	24,848
3576			39800	2002	$	21,592	1.09	$	23,551
3577			39800	2003	$	49,631	1.07	$	53,006
3578			39800	2004	$	30,926	1.06	$	32,702
3579			39800	2005	$	135,530	1.04	$	140,804
3580			39800	2006	$	24,690	1.02	$	25,066
3581			39800	2007	$	4,404	1.00	$	4,404
3582			39800	Total	$	949,329		$	1,120,968
3583									
3584	Transmission, Distributi				$	2,190,517,491		$	5,866,142,316
3585									
3586	Grand Total				$	5,053,506,878		$	13,177,325,794
3587									

Common Plant
Replacement Cost New Less Depreciation

Ferc Account	Account Description	Original Cost	Reproduction Cost New	RCNLD
301	Organization, Common	$ 126,863	$ 126,863	$ 126,863
303	Miscellaneous Intangible Plant[1]	$ 122,937,121	$ 122,937,121	$ 122,937,121
389	Land	$ 8,877,838	$ 157,485,848	$ 157,485,848
390	Structures & Improvements	$ 76,127,216	$ 210,061,213	$ 121,835,503
391.1	Office Furniture & Equipment	$ 26,813,139	$ 42,082,292	$ 23,145,260
391.2	Computer Equipment, Common	$ 17,985,558	$ 8,930,151	$ 6,340,407
392.1	Trns Eq - Autos, Common	$ 442,847	$ 539,249	$ 361,297
392.2	Trns Eq - Trailers, Common	$ 1,778,192	$ 2,555,823	$ 1,099,004
392.3	Trns Eq - Truck < 13000, Com	$ 2,005,379	$ 2,584,743	$ 1,111,440
392.4	Trns Eq - Truck > 13000, Com	$ 2,130,558	$ 2,918,070	$ 2,042,649
392.8	Trns Eq - Helicopter, Common	$ 1,222,324	$ 2,009,614	$ 1,266,057
393	Stores Equipment	$ 4,124,720	$ 8,200,585	$ 6,139,757
394	Tools, Shop & Garage Equipment	$ 11,120,766	$ 15,578,078	$ 11,839,340
395	Laboratory Equipment	$ 2,787,500	$ 3,887,533	$ 3,207,214
396	Power Operated Equipment	$ 4,517,303	$ 8,328,342	$ 1,748,952
397	Communication Equipment	$ 49,694,825	$ 43,919,487	$ 29,279,658
398	Miscellaneous Equipment	$ 2,589,365	$ 3,366,808	$ 2,525,106
		$ 335,281,514	$ 635,511,819	492,491,477

Allocation of Common Plant between Electric & Gas

		Original Cost	Reproduction Cost New	RCNLD
71.26%	**Electric Allocation of Common Plant**			
	Organization, Common	$ 90,403	$ 90,403	$ 90,403
38.99%	Miscellaneous Intangible Plant[1]	$ 63,185,925	$ 63,185,925	$ 63,185,925
	Land	$ 6,326,347	$ 112,224,416	$ 112,224,416
	Structures & Improvements	$ 54,248,254	$ 149,689,620	$ 86,819,980
	Office Furniture & Equipment	$ 31,923,551	$ 36,351,467	$ 21,011,487
	Trns Eq - Autos, Common	$ 5,401,009	$ 7,558,903	$ 4,190,406
	Stores Equipment	$ 2,939,275	$ 5,843,737	$ 4,375,191
	Tools, Shop & Garage Equipment	$ 7,924,658	$ 11,100,939	$ 8,436,713
	Laboratory Equipment	$ 1,986,373	$ 2,770,256	$ 2,285,461
	Power Operated Equipment	$ 3,219,030	$ 5,934,776	$ 1,246,303
	Communication Equipment	$ 35,412,532	$ 31,297,026	$ 20,864,684
	Miscellaneous Equipment	$ 1,845,182	$ 2,399,188	$ 1,799,391
		$ 214,502,539	$ 428,446,655	$ 326,530,358
28.74%	**Gas Allocation of Common Plant**			
		$ 36,460	$ 36,460	$ 36,460
61.01%	Miscellaneous Intangible Plant[1]	$ 59,751,196	$ 59,751,196	$ 59,751,196
	Land	$ 2,551,491	$ 45,261,433	$ 45,261,433
	Structures & Improvements	$ 21,878,962	$ 60,371,593	$ 35,015,524
	Office Furniture & Equipment	$ 12,875,145	$ 14,660,976	$ 8,474,181
	Trns Eq - Autos, Common	$ 2,178,291	$ 3,048,595	$ 1,690,040
	Stores Equipment	$ 1,185,445	$ 2,356,848	$ 1,764,566
	Tools, Shop & Garage Equipment	$ 3,196,108	$ 4,477,140	$ 3,402,626
	Laboratory Equipment	$ 801,128	$ 1,117,277	$ 921,753
	Power Operated Equipment	$ 1,298,273	$ 2,393,565	$ 502,649
	Communication Equipment	$ 14,282,293	$ 12,622,461	$ 8,414,974
	Miscellaneous Equipment	$ 744,184	$ 967,621	$ 725,716
		$ 120,778,975	$ 207,065,165	$ 165,961,118

[1] $ 75,671,112 of Account 303 is allocated 38.99% to electric plant and 61.01% to gas plant.

Common Plant
Reproduction Cost by Vintage Year

Line No.	(a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
1	Organization, Common					
2		30100	1936	$ 126,863	1.00	$ 126,863
3		30100	Total	$ 126,863		$ 126,863
4	Intangible Plant, Common					
5		30300	1991	$ 606,839	1.00	$ 606,839
6		30300	1992	$ 489,178	1.00	$ 489,178
7		30300	1993	$ 2,260,018	1.00	$ 2,260,018
8		30300	1994	$ 6,007,188	1.00	$ 6,007,188
9		30300	1995	$ 60,711,646	1.00	$ 60,711,646
10		30300	1996	$ 3,246,902	1.00	$ 3,246,902
11		30300	1997	$ 2,571,853	1.00	$ 2,571,853
12		30300	1998	$ 33,145	1.00	$ 33,145
13		30300	1999	$ 939,866	1.00	$ 939,866
14		30300	2000	$ 25,485,053	1.00	$ 25,485,053
15		30300	2001	$ 4,568,121	1.00	$ 4,568,121
16		30300	2002	$ 4,709,133	1.00	$ 4,709,133
17		30300	2003	$ 398,008	1.00	$ 398,008
18		30300	2004	$ 1,483,886	1.00	$ 1,483,886
19		30300	2005	$ 192,167	1.00	$ 192,167
20		30300	2006	$ 5,743,282	1.00	$ 5,743,282
21		30300	2007	$ 3,490,836	1.00	$ 3,490,836
22		30300	Total	$ 122,937,121		$ 122,937,121
23	Land, Common					
24		38910	1928			
25		38910	1929			
26		38910	1931	$ 549	61.54	$ 33,771
27		38910	1936	$ 193	68.97	$ 13,338
28		38910	1938	$ 6,576	63.49	$ 417,530
29		38910	1940	$ 30,022	63.49	$ 1,906,159
30		38910	1941	$ 754	61.54	$ 46,424
31		38910	1942	$ 184	54.79	$ 10,075
32		38910	1946	$ 3,532	34.48	$ 121,808
33		38910	1948	$ 257	29.41	$ 7,548
34		38910	1949	$ 15,437	28.78	$ 444,232
35		38910	1950	$ (283)	29.20	$ (8,272)
36		38910	1951	$ 50,712	24.24	$ 1,229,384
37		38910	1952	$ 7,679	21.98	$ 168,779
38		38910	1953	$ 14,823	21.39	$ 317,067
39		38910	1954	$ 6,877	21.62	$ 148,692
40		38910	1955	$ 13,392	20.20	$ 270,542
41		38910	1956	$ 15,736	19.05	$ 299,735
42		38910	1958	$ 1,699	16.53	$ 28,089
43		38910	1960	$ 4,768	15.15	$ 72,245
44		38910	1961	$ 33,461	15.63	$ 522,820
45		38910	1962	$ 3,759	15.15	$ 56,956
46		38910	1963	$ (29,049)	14.44	$ (419,476)
47		38910	1964	$ 21,310	13.42	$ 286,045
48		38910	1965	$ 6,311	12.58	$ 79,384
49		38910	1966	$ 6,653	10.99	$ 73,111
50		38910	1967	$ 12,713	10.18	$ 129,399

Common Plant
Reproduction Cost by Vintage Year

Line No. (a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
51	38910	1968	$ (564)	9.64	$ (5,439)
52	38910	1970	$ 25,129	9.85	$ 247,576
53	38910	1971	$ 5,000	9.48	$ 47,397
54	38910	1972	$ 16,907	9.20	$ 155,466
55	38910	1974	$ 10,523	6.76	$ 71,098
56	38910	1976	$ 35,313	4.50	$ 159,068
57	38910	1978	$ 72,482	2.95	$ 213,654
58	38910	1979	$ 9,117	2.52	$ 22,950
59	38910	1980	$ 66,706	2.15	$ 143,222
60	38910	1981	$ 275,786	1.97	$ 543,152
61	38910	1983	$ 16,549	2.48	$ 41,116
62	38910	1984	$ 7,182	2.43	$ 17,443
63	38910	1985	$ 9,138	2.98	$ 27,196
64	38910	1986	$ 1,260,708	3.43	$ 4,321,191
65	38910	1987	$ 62,414	3.77	$ 235,302
66	38910	1989	$ 11,566	3.20	$ 37,042
67	38910	1991	$ 399,520	3.10	$ 1,237,862
68	38910	1992	$ 38,204	3.02	$ 115,332
69	38910	1996	$ 6,232	2.30	$ 14,325
70	38910	Total	$ 2,555,977		$ 13,900,340
71 Land Rights, Common					
72	38920	1950	$ 3	29.20	$ 89
73	38920	1952	$ 102	21.98	$ 2,231
74	38920	1954	$ 708	21.62	$ 15,318
75	38920	1955	$ 2	20.20	$ 40
76	38920	1956	$ 348	19.05	$ 6,632
77	38920	1957	$ 100	17.39	$ 1,739
78	38920	1959	$ 3,195	15.56	$ 49,723
79	38920	1960	$ 1,302	15.15	$ 19,727
80	38920	1963	$ 3,171	14.44	$ 45,794
81	38920	1964	$ 100	13.42	$ 1,342
82	38920	1967	$ 300	10.18	$ 3,053
83	38920	1981	$ 4,353	1.97	$ 8,573
84	38920	1991	$ 1,629	3.10	$ 5,047
85	38920	1995	$ 8,067	2.47	$ 19,919
86	38920	1998	$ 53	1.94	$ 103
87	38920	1999	$ 5,253	1.84	$ 9,683
88	38920	Total	$ 28,686		$ 189,014
89 Indiana Rights of Way, Common					
90	38930	1936	$ 1,757,454	68.97	$ 121,203,741
91	38930	1955	$ 820	20.20	$ 16,572
92	38930	1956	$ 73,003	19.05	$ 1,390,536
93	38930	1957	$ 16,092	17.39	$ 279,867
94	38930	1958	$ 365	16.53	$ 6,035
95	38930	1959	$ 766	15.56	$ 11,918
96	38930	1960	$ 51,480	15.15	$ 779,998
97	38930	1961	$ 1,000	15.63	$ 15,625
98	38930	1962	$ 1,698	15.15	$ 25,727
99	38930	1963	$ 42,160	14.44	$ 608,815
100	38930	1964	$ 287	13.42	$ 3,855
101	38930	1965	$ 132,276	12.58	$ 1,663,843
102	38930	1967	$ 13,219	10.18	$ 134,549

Common Plant
Reproduction Cost by Vintage Year

Line No.	(a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
103		38930	1968	$ 656,616	9.64	$ 6,328,829
104		38930	1969	$ 6,764	9.59	$ 64,882
105		38930	1970	$ 100	9.85	$ 985
106		38930	1971	$ 17,158	9.48	$ 162,640
107		38930	1972	$ 7,571	9.20	$ 69,619
108		38930	1975	$ 1,522	5.56	$ 8,456
109		38930	1976	$ 5,499	4.50	$ 24,768
110		38930	1977	$ 27,479	3.37	$ 92,521
111		38930	1979	$ 4,014	2.52	$ 10,105
112		38930	1987	$ 394	3.77	$ 1,484
113		38930	1992	$ 3,475,000	3.02	$ 10,490,566
114		38930	2005	$ 437	1.27	$ 557
115		38930	Total	$ 6,293,175		$ 143,396,494
116	Structures & Improvement, Com					
117		39000	1914	$ 144	52.10	$ 7,519
118		39000	1928	$ 38,504	27.58	$ 1,061,950
119		39000	1929	$ 7,971	27.58	$ 219,854
120		39000	1931	$ 31,710	29.30	$ 929,221
121		39000	1932	$ 2,309	33.49	$ 77,318
122		39000	1934	$ 296	29.30	$ 8,683
123		39000	1936	$ 1,614	29.30	$ 47,288
124		39000	1937	$ 68	27.58	$ 1,864
125		39000	1938	$ 973	27.58	$ 26,843
126		39000	1941	$ 1,085	26.05	$ 28,269
127		39000	1942	$ 36	23.44	$ 844
128		39000	1943	$ 365	23.44	$ 8,566
129		39000	1946	$ 243	19.54	$ 4,744
130		39000	1947	$ 2	16.75	$ 36
131		39000	1948	$ 1,023	15.12	$ 15,466
132		39000	1949	$ 2,298	14.21	$ 32,647
133		39000	1950	$ 27,492	13.40	$ 368,291
134		39000	1951	$ 281,414	12.67	$ 3,566,098
135		39000	1952	$ 157,965	12.34	$ 1,949,063
136		39000	1953	$ 237,724	11.72	$ 2,786,525
137		39000	1954	$ 1,851,953	11.16	$ 20,674,259
138		39000	1955	$ 260,698	10.66	$ 2,778,012
139		39000	1956	$ 875,306	9.98	$ 8,731,948
140		39000	1957	$ 33,413	9.38	$ 313,329
141		39000	1958	$ 131,614	9.02	$ 1,186,718
142		39000	1959	$ 10,698	8.85	$ 94,637
143		39000	1960	$ 68,552	8.68	$ 595,218
144		39000	1961	$ 16,751	8.68	$ 145,447
145		39000	1962	$ 36,190	8.52	$ 308,517
146		39000	1963	$ 251,237	8.52	$ 2,141,753
147		39000	1964	$ 517,643	8.37	$ 4,334,027
148		39000	1965	$ 78,655	8.08	$ 635,842
149		39000	1966	$ 1,531,351	7.81	$ 11,966,657
150		39000	1967	$ 454,215	7.56	$ 3,434,936
151		39000	1968	$ 599,323	7.10	$ 4,257,616
152		39000	1969	$ 111,556	6.60	$ 736,690
153		39000	1970	$ 49,997	6.09	$ 304,442
154		39000	1971	$ 132,178	5.45	$ 720,627

Line No.	(a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
155		39000	1972	$ 593,457	5.15	$ 3,057,718
156		39000	1973	$ 1,038,287	4.69	$ 4,868,183
157		39000	1974	$ 132,469	3.97	$ 525,245
158		39000	1975	$ 168,838	3.62	$ 611,292
159		39000	1976	$ 48,682	3.51	$ 170,978
160		39000	1977	$ 295,260	3.31	$ 978,356
161		39000	1978	$ 662,038	3.00	$ 1,983,434
162		39000	1979	$ 803,027	2.75	$ 2,205,052
163		39000	1980	$ 2,399,025	2.52	$ 6,055,575
164		39000	1981	$ 4,891,483	2.37	$ 11,612,422
165		39000	1982	$ 1,825,988	2.30	$ 4,201,938
166		39000	1983	$ 2,887,033	2.22	$ 6,415,324
167		39000	1984	$ 1,888,488	2.12	$ 3,997,512
168		39000	1985	$ 8,659,797	2.05	$ 17,788,785
169		39000	1986	$ 12,664,683	2.00	$ 25,349,189
170		39000	1987	$ 893,639	1.95	$ 1,744,006
171		39000	1988	$ 2,259,613	1.87	$ 4,220,944
172		39000	1989	$ 558,255	1.79	$ 999,036
173		39000	1990	$ 1,265,843	1.77	$ 2,246,023
174		39000	1991	$ 3,414,598	1.79	$ 6,122,336
175		39000	1992	$ 3,295,817	1.78	$ 5,881,251
176		39000	1993	$ 1,171,037	1.70	$ 1,987,548
177		39000	1994	$ 826,564	1.61	$ 1,327,220
178		39000	1995	$ 703,565	1.54	$ 1,084,233
179		39000	1996	$ 1,187,395	1.49	$ 1,768,800
180		39000	1997	$ 1,508,787	1.46	$ 2,200,372
181		39000	1998	$ 808,576	1.43	$ 1,156,718
182		39000	1999	$ 2,177,518	1.38	$ 3,011,698
183		39000	2000	$ 154,176	1.33	$ 205,656
184		39000	2001	$ 344,069	1.28	$ 438,973
185		39000	2002	$ 2,722,644	1.24	$ 3,368,224
186		39000	2003	$ 849,350	1.21	$ 1,027,032
187		39000	2004	$ 960,256	1.14	$ 1,096,789
188		39000	2005	$ 593,595	1.10	$ 651,415
189		39000	2006	$ 482,285	1.06	$ 509,009
190		39000	2007	$ 445,603	1.00	$ 445,603
191		39000	Total	$ 73,386,304		$ 205,815,653
192	Structures Leased Others, Com					
193		39010	1994	$ 2,256,364	1.61	$ 3,623,062
194		39010	1995	$ 1,536	1.54	$ 2,367
195		39010	1997	$ 87,386	1.46	$ 127,442
196		39010	2001	$ 84,108	1.28	$ 107,307
197		39010	2002	$ 311,517	1.24	$ 385,382
198		39010	Total	$ 2,740,911		$ 4,245,560
199	Office Furniture & Equip, Com					
200		39110	1977	$ 40,415	2.90	$ 117,284
201		39110	1978	$ 163,766	2.71	$ 444,042
202		39110	1979	$ 268,037	2.50	$ 671,159
203		39110	1980	$ 445,441	2.30	$ 1,022,603
204		39110	1981	$ 442,251	2.10	$ 928,107
205		39110	1982	$ 270,455	1.98	$ 534,939
206		39110	1983	$ 626,667	1.90	$ 1,192,338

Line No.	(a)	(b) FERC Account	(c) Installation Year		(d) Original Cost	(e) Adjustment Factor		(f) Reproduction Cost
207		39110	1984	$	842,319	1.83	$	1,544,661
208		39110	1985	$	1,492,247	1.78	$	2,655,726
209		39110	1986	$	3,567,245	1.74	$	6,211,615
210		39110	1987	$	705,355	1.69	$	1,195,575
211		39110	1988	$	437,434	1.64	$	716,981
212		39110	1989	$	6,682,768	1.58	$	10,554,400
213		39110	1990	$	547,261	1.52	$	832,174
214		39110	1991	$	1,581,016	1.47	$	2,322,865
215		39110	1992	$	1,552,850	1.44	$	2,230,219
216		39110	1993	$	995,815	1.40	$	1,397,901
217		39110	1994	$	362,162	1.37	$	497,816
218		39110	1995	$	602,403	1.35	$	811,439
219		39110	1996	$	499,979	1.32	$	660,945
220		39110	1997	$	435,628	1.30	$	566,448
221		39110	1998	$	44,135	1.29	$	56,760
222		39110	1999	$	121,488	1.27	$	154,011
223		39110	2000	$	791,402	1.24	$	981,869
224		39110	2001	$	63,165	1.21	$	76,531
225		39110	2002	$	621,944	1.19	$	740,618
226		39110	2003	$	2,033,961	1.17	$	2,371,598
227		39110	2004	$	23,138	1.11	$	25,670
228		39110	2005	$	732	1.05	$	765
229		39110	2006	$	551,659	1.02	$	565,232
230		39110	Total	$	26,813,139		$	42,082,292
231	Computer Equipment, Common							
232		39120	1983	$	262,313	1.19	$	313,083
233		39120	1987	$	262,313	1.06	$	278,911
234		39120	1991	$	6,196	0.09	$	529
235		39120	1992	$	16,740	0.10	$	1,705
236		39120	1993	$	33,951	0.12	$	3,939
237		39120	1994	$	10,164	0.13	$	1,283
238		39120	1995	$	65,256	0.14	$	9,208
239		39120	1996	$	1,240	0.17	$	208
240		39120	1997	$	30,316	0.21	$	6,308
241		39120	1998	$	14,988	0.26	$	3,916
242		39120	1999	$	5,396,422	0.31	$	1,690,245
243		39120	2000	$	612,046	0.35	$	215,963
244		39120	2001	$	2,859	0.40	$	1,143
245		39120	2002	$	6,546,891	0.47	$	3,056,362
246		39120	2003	$	2,699,337	0.58	$	1,566,717
247		39120	2005	$	1,029,037	0.77	$	791,824
248		39120	2006	$	47,278	0.86	$	40,597
249		39120	2007	$	948,209	1.00	$	948,209
250		39120	Total	$	17,985,558		$	8,930,151
251	Trns Eq - Autos, Common							
252		39210	1964	$	10,833	4.58	$	49,583
253		39210	1966	$	10,435	4.37	$	45,610
254		39210	1968	$	3,046	4.07	$	12,386
255		39210	1969	$	(22,250)	3.87	$	(86,194)
256		39210	1970	$	(7,707)	3.68	$	(28,352)
257		39210	1971	$	(362)	3.50	$	(1,269)
258		39210	1972	$	13,427	3.36	$	45,086

Line No.	(a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
259		39210	1978	$ 9,411	2.21	$ 20,833
260		39210	1979	$ (7,459)	2.04	$ (15,249)
261		39210	1980	$ 21,228	1.87	$ 39,789
262		39210	1981	$ (20,465)	1.71	$ (35,066)
263		39210	1982	$ 20,476	1.61	$ 33,067
264		39210	1983	$ 12,114	1.55	$ 18,819
265		39210	1984	$ (1)	1.50	$ (1)
266		39210	1985	$ (11,354)	1.45	$ (16,498)
267		39210	1986	$ 13,400	1.42	$ 19,052
268		39210	1987	$ 3,182	1.38	$ 4,404
269		39210	1989	$ (38,634)	1.29	$ (49,817)
270		39210	1990	$ 51,736	1.24	$ 64,231
271		39210	1991	$ 67,207	1.20	$ 80,620
272		39210	1992	$ 15,715	1.17	$ 18,428
273		39210	1993	$ 14,442	1.15	$ 16,553
274		39210	1994	$ 25,740	1.12	$ 28,887
275		39210	1995	$ 71,326	1.10	$ 78,444
276		39210	1996	$ 113,701	1.08	$ 122,720
277		39210	2000	$ 39,982	1.01	$ 40,500
278		39210	2001	$ 16,723	0.99	$ 16,543
279		39210	2003	$ 16,955	0.95	$ 16,141
280		39210	Total	$ 442,847		$ 539,249
281	Trns Eq - Trailers, Common					
282		39220	1961	$ 51	4.43	$ 224
283		39220	1974	$ (2,371)	2.71	$ (6,433)
284		39220	1978	$ 23,625	2.06	$ 48,658
285		39220	1979	$ 32,846	1.90	$ 62,472
286		39220	1981	$ 88,860	1.75	$ 155,915
287		39220	1983	$ 38,205	1.67	$ 63,631
288		39220	1984	$ 36,641	1.62	$ 59,311
289		39220	1985	$ 19,247	1.59	$ 30,633
290		39220	1986	$ 148,084	1.61	$ 238,691
291		39220	1987	$ 60,996	1.62	$ 98,904
292		39220	1988	$ 64,903	1.58	$ 102,359
293		39220	1991	$ 101,753	1.48	$ 151,081
294		39220	1992	$ 223,656	1.45	$ 324,233
295		39220	1993	$ 49,941	1.42	$ 70,781
296		39220	1994	$ 254,223	1.37	$ 348,868
297		39220	1995	$ 7,688	1.28	$ 9,840
298		39220	1996	$ 297,660	1.29	$ 383,051
299		39220	1997	$ 25,294	1.29	$ 32,572
300		39220	1998	$ 223,810	1.25	$ 279,689
301		39220	1999	$ 18,336	1.24	$ 22,705
302		39220	2000	$ 64,745	1.21	$ 78,637
303		39220	Total	$ 1,778,192		$ 2,555,823
304	Trns Eq - Truck < 13000, Com					
305		39230	1968	$ (9,381)	4.48	$ (42,028)
306		39230	1970	$ 7,707	4.05	$ 31,241
307		39230	1973	$ 5,614	3.50	$ 19,673
308		39230	1975	$ (12,187)	2.94	$ (35,794)
309		39230	1977	$ 5,707	2.61	$ 14,900
310		39230	1978		2.44	

Common Plant
Reproduction Cost by Vintage Year

Line No. (a)	(b) FERC Account	(c) Installation Year		(d) Original Cost	(e) Adjustment Factor		(f) Reproduction Cost
311	39230	1979	$	13,596	2.25	$	30,629
312	39230	1980	$	(7,249)	2.07	$	(14,973)
313	39230	1981	$	40,059	1.89	$	75,632
314	39230	1982	$	39,651	1.78	$	70,558
315	39230	1985	$	3,566	1.60	$	5,709
316	39230	1986	$	110,225	1.57	$	172,674
317	39230	1987	$	89,915	1.52	$	137,112
318	39230	1988	$	14,616	1.47	$	21,552
319	39230	1989	$	23,710	1.42	$	33,688
320	39230	1990	$	21,507	1.37	$	29,422
321	39230	1991	$	194,555	1.32	$	257,162
322	39230	1992	$	210,578	1.29	$	272,087
323	39230	1993	$	121,038	1.26	$	152,861
324	39230	1994	$	209,825	1.24	$	259,477
325	39230	1995	$	226,845	1.21	$	274,900
326	39230	1996	$	416,137	1.19	$	494,911
327	39230	1997	$	110,853	1.17	$	129,679
328	39230	1998	$	91,185	1.16	$	105,500
329	39230	1999	$	77,309	1.14	$	88,170
330	39230	2003	$	(1)	1.05	$	(1)
331	39230	Total	$	2,005,379		$	2,584,743
332 Trns Eq - Truck > 13000, Com							
333	39240	1986	$	74,298	1.73	$	128,265
334	39240	1987	$	9,381	1.68	$	15,764
335	39240	1988	$	78,601	1.63	$	127,727
336	39240	1991	$	6,775	1.46	$	9,869
337	39240	1992	$	199,613	1.42	$	284,228
338	39240	1993	$	697,922	1.39	$	971,323
339	39240	1994	$	272,321	1.36	$	371,114
340	39240	1995	$	49,344	1.34	$	65,896
341	39240	1996	$	107,995	1.31	$	141,539
342	39240	1997	$	223,551	1.29	$	288,191
343	39240	1998	$	168,997	1.28	$	215,474
344	39240	1999	$	48,865	1.26	$	61,414
345	39240	2000	$	192,895	1.23	$	237,267
346	39240	Total	$	2,130,558		$	2,918,070
347 Trns Eq - Helicopter, Common							
348	39280	1990	$	1,017,388	1.67	$	1,700,617
349	39280	1993	$	204,935	1.51	$	308,997
350	39280	Total	$	1,222,324		$	2,009,614
351 Stores Equipment, Common							
352	39300	1973	$	13,862	5.55	$	76,902
353	39300	1974	$	41,547	4.55	$	188,922
354	39300	1975	$	91,573	3.93	$	360,285
355	39300	1976	$	37,700	3.83	$	144,236
356	39300	1977	$	9,117	3.47	$	31,611
357	39300	1978	$	45,388	3.24	$	147,247
358	39300	1979	$	39,191	3.06	$	120,117
359	39300	1980	$	68,767	2.84	$	195,635
360	39300	1981	$	72,664	2.60	$	189,251
361	39300	1982	$	12,379	2.37	$	29,347
362	39300	1983	$	2,242	2.35	$	5,271

Common Plant
Reproduction Cost by Vintage Year

Line No.	(a)	(b) FERC Account	(c) Installation Year		(d) Original Cost	(e) Adjustment Factor		(f) Reproduction Cost
363		39300	1984	$	25,126	2.36	$	59,314
364		39300	1985	$	33,522	2.32	$	77,808
365		39300	1986	$	1,211,562	2.29	$	2,777,339
366		39300	1987	$	178,024	2.22	$	395,037
367		39300	1988	$	112,058	2.02	$	226,465
368		39300	1989	$	49,283	1.86	$	91,437
369		39300	1990	$	26,177	1.73	$	45,345
370		39300	1991	$	128,312	1.72	$	221,231
371		39300	1992	$	129,272	1.72	$	222,713
372		39300	1993	$	8,785	1.71	$	14,984
373		39300	1994	$	69,309	1.65	$	114,348
374		39300	1995	$	62,708	1.56	$	98,131
375		39300	1996	$	84,523	1.57	$	133,019
376		39300	1997	$	47,733	1.55	$	73,812
377		39300	1998	$	66,132	1.49	$	98,290
378		39300	1999	$	280,835	1.47	$	413,794
379		39300	2000	$	106,529	1.46	$	155,416
380		39300	2001	$	205,934	1.44	$	295,773
381		39300	2002	$	427,323	1.44	$	615,335
382		39300	2003	$	191,292	1.43	$	273,856
383		39300	2004	$	191,858	1.28	$	246,088
384		39300	2005	$	36,508	1.18	$	43,160
385		39300	2006	$	17,483	1.09	$	19,064
386		39300	Total	$	4,124,720		$	8,200,585
387	Tools, Shop, Garage Eq, Com							
388		39400	1967	$	31,661	4.62	$	146,130
389		39400	1968	$	55,689	4.43	$	246,508
390		39400	1971	$	46,424	3.81	$	177,081
391		39400	1974	$	43,560	3.18	$	138,335
392		39400	1977	$	54,377	2.58	$	140,265
393		39400	1978	$	60,508	2.41	$	145,828
394		39400	1979	$	134,192	2.23	$	298,668
395		39400	1980	$	146,407	2.04	$	298,752
396		39400	1981	$	211,747	1.87	$	394,983
397		39400	1982	$	278,733	1.76	$	490,037
398		39400	1983	$	715,959	1.69	$	1,210,826
399		39400	1984	$	187,026	1.63	$	304,852
400		39400	1985	$	704,452	1.59	$	1,122,440
401		39400	1986	$	1,166,594	1.55	$	1,807,556
402		39400	1987	$	274,105	1.50	$	411,789
403		39400	1988	$	123,209	1.45	$	178,358
404		39400	1989	$	120,779	1.39	$	167,548
405		39400	1990	$	332,760	1.34	$	446,052
406		39400	1991	$	523,258	1.30	$	679,069
407		39400	1992	$	478,031	1.27	$	606,846
408		39400	1993	$	890,677	1.23	$	1,099,018
409		39400	1994	$	262,490	1.21	$	318,821
410		39400	1995	$	500,162	1.19	$	593,783
411		39400	1996	$	388,625	1.16	$	450,860
412		39400	1997	$	327,094	1.14	$	372,842
413		39400	1998	$	119,074	1.12	$	133,487
414		39400	1999	$	501,704	1.11	$	555,555

Line No.	(a)	(b) FERC Account	(c) Installation Year		(d) Original Cost	(e) Adjustment Factor		(f) Reproduction Cost
415		39400	2000	$	138,383	1.10	$	151,691
416		39400	2001	$	439,774	1.09	$	478,206
417		39400	2002	$	701,946	1.09	$	764,821
418		39400	2003	$	948,852	1.09	$	1,030,399
419		39400	2004	$	43,381	1.07	$	46,216
420		39400	2005	$	6,658	1.05	$	6,961
421		39400	2006	$	39,535	1.03	$	40,555
422		39400	2007	$	122,940	1.00	$	122,940
423		39400	Total	$	11,120,766		$	15,578,078
424	Laboratory Equipment, Common							
425		39500	1982	$	40,589	2.14	$	86,717
426		39500	1983	$	2,689	2.06	$	5,526
427		39500	1984	$	4,420	1.98	$	8,756
428		39500	1985	$	2,134	1.92	$	4,102
429		39500	1986	$	68,334	1.88	$	128,528
430		39500	1987	$	110,251	1.83	$	201,856
431		39500	1988	$	205,490	1.77	$	363,810
432		39500	1990	$	133,074	1.64	$	218,576
433		39500	1991	$	83,366	1.59	$	132,303
434		39500	1992	$	34,604	1.53	$	52,804
435		39500	1993	$	152,474	1.47	$	223,845
436		39500	1994	$	1,820	1.43	$	2,609
437		39500	1995	$	376,222	1.39	$	524,661
438		39500	1996	$	193,604	1.36	$	263,733
439		39500	1997	$	185,043	1.33	$	245,949
440		39500	1998	$	72,681	1.30	$	94,236
441		39500	1999	$	302,236	1.27	$	384,026
442		39500	2000	$	8,583	1.25	$	10,716
443		39500	2001	$	226,630	1.23	$	277,946
444		39500	2002	$	32,522	1.20	$	38,894
445		39500	2003	$	420,460	1.16	$	485,994
446		39500	2005	$	13,805	1.07	$	14,793
447		39500	2006	$	16,782	1.04	$	17,464
448		39500	2007	$	99,688	1.00	$	99,688
449		39500	Total	$	2,787,500		$	3,887,533
450	Power Operated Equip, Common							
451		39600	1951	$	1,275	7.34	$	9,356
452		39600	1952	$	1,269	7.22	$	9,158
453		39600	1962	$	5,229	6.03	$	31,522
454		39600	1964	$	928	5.88	$	5,453
455		39600	1965	$	2,425	5.77	$	13,990
456		39600	1966	$	40,483	5.61	$	227,136
457		39600	1967	$	4,576	5.44	$	24,902
458		39600	1968	$	36,762	5.22	$	191,880
459		39600	1970	$	53,578	4.72	$	253,031
460		39600	1971	$	1,000	4.50	$	4,498
461		39600	1972	$	209,550	4.31	$	903,283
462		39600	1973	$	5,318	4.08	$	21,713
463		39600	1974	$	(0)	3.74	$	(0)
464		39600	1977	$	(11,756)	3.04	$	(35,757)
465		39600	1978	$	163,728	2.84	$	465,286
466		39600	1979	$	83,501	2.62	$	219,139

Common Plant
Reproduction Cost by Vintage Year

Line No.	(a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
467		39600	1980	$ 63,015	2.41	$ 151,621
468		39600	1981	$ 191,053	2.20	$ 420,224
469		39600	1982	$ 19,046	2.07	$ 39,483
470		39600	1983	$ 19,816	1.99	$ 39,516
471		39600	1985	$ 199,236	1.88	$ 374,323
472		39600	1986	$ 123,253	1.84	$ 226,691
473		39600	1990	$ (40)	1.62	$ (65)
474		39600	1991	$ 294,518	1.57	$ 461,716
475		39600	1992	$ 544,188	1.54	$ 837,413
476		39600	1993	$ 454,497	1.50	$ 681,922
477		39600	1994	$ 940,085	1.45	$ 1,361,600
478		39600	1995	$ 365,788	1.40	$ 512,424
479		39600	2000	$ 139,499	1.26	$ 176,161
480		39600	2001	$ 562,512	1.24	$ 697,515
481		39600	2005	$ 2,970	1.08	$ 3,209
482		39600	Total	$ 4,517,303		$ 8,328,342
483	Communication Equip, Common					
484		39700	1985	$ 34,069	0.96	$ 32,639
485		39700	1990	$ 189,489	0.89	$ 168,865
486		39700	1991	$ 17,321	0.88	$ 15,293
487		39700	1992	$ 166,238	0.87	$ 145,174
488		39700	1993	$ 43	0.86	$ 37
489		39700	1994	$ 143,001	0.85	$ 120,913
490		39700	1995	$ 3,119	0.84	$ 2,623
491		39700	1996	$ 20,750	0.83	$ 17,286
492		39700	1997	$ 3,178,213	0.83	$ 2,631,572
493		39700	1998	$ 2,413	0.83	$ 2,010
494		39700	1999	$ 211,924	0.85	$ 179,667
495		39700	2000	$ 133,778	0.87	$ 116,087
496		39700	2002	$ 139,188	0.91	$ 126,992
497		39700	2003	$ 151,605	0.94	$ 142,809
498		39700	2004	$ 41,103	0.97	$ 40,017
499		39700	2005	$ 48,304	0.99	$ 47,707
500		39700	2006	$ 46,926	1.00	$ 46,877
501		39700	2007	$ 36,176	1.00	$ 36,176
502		39700	Total	$ 4,563,661		$ 3,872,745
503	Communication Equip, Common					
504		39710	1958	$ 330	3.26	$ 1,075
505		39710	1965	$ 707	2.96	$ 2,095
506		39710	1970	$ 165	2.43	$ 400
507		39710	1971	$ 471	2.31	$ 1,088
508		39710	1978	$ 212	1.46	$ 309
509		39710	1980	$ 94	1.24	$ 116
510		39710	1981	$ 212	1.13	$ 240
511		39710	1984	$ 7,365	0.99	$ 7,270
512		39710	1985	$ 165	0.96	$ 158
513		39710	1987	$ 718,959	0.93	$ 665,472
514		39710	1988	$ 1,679,868	0.92	$ 1,548,906
515		39710	1989	$ 844,384	0.91	$ 764,575
516		39710	1990	$ 2,017,518	0.89	$ 1,797,937
517		39710	1991	$ 1,512,132	0.88	$ 1,335,136
518		39710	1992	$ 9,352,076	0.87	$ 8,167,082

Line No. (a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
519	39710	1993	$ 1,950,835	0.86	$ 1,673,142
520	39710	1994	$ 2,404,377	0.85	$ 2,033,003
521	39710	1995	$ 1,210,823	0.84	$ 1,018,409
522	39710	1996	$ 1,397,819	0.83	$ 1,164,444
523	39710	1997	$ 265,529	0.83	$ 219,859
524	39710	1998	$ 867,437	0.83	$ 722,612
525	39710	1999	$ 1,699,904	0.85	$ 1,441,157
526	39710	2000	$ 227,397	0.87	$ 197,325
527	39710	2001	$ 428,802	0.88	$ 378,262
528	39710	2002	$ 69,641	0.91	$ 63,539
529	39710	2003	$ 2,706,834	0.94	$ 2,549,801
530	39710	2004	$ 111,643	0.97	$ 108,693
531	39710	2005	$ 35,530	0.99	$ 35,091
532	39710	2006	$ 240,553	1.00	$ 240,302
533	39710	2007	$ 720,069	1.00	$ 720,069
534	39710	Total	$ 30,471,852		$ 26,857,568
535 Microwave Equipment, Common					
536	39720	1962	$ 334	3.10	$ 1,034
537	39720	1970	$ 925	2.43	$ 2,244
538	39720	1971	$ 308	2.31	$ 712
539	39720	1977	$ 1,002	1.56	$ 1,566
540	39720	1980	$ 2,092	1.24	$ 2,586
541	39720	1982	$ 146	1.06	$ 155
542	39720	1983	$ 96,479	1.02	$ 98,814
543	39720	1987	$ 177,210	0.93	$ 164,026
544	39720	1988	$ 226,360	0.92	$ 208,713
545	39720	1989	$ 326,328	0.91	$ 295,484
546	39720	1990	$ 1,088,770	0.89	$ 970,271
547	39720	1991	$ 1,057,130	0.88	$ 933,392
548	39720	1992	$ 603,411	0.87	$ 526,953
549	39720	1993	$ 435,736	0.86	$ 373,711
550	39720	1994	$ 253,372	0.85	$ 214,237
551	39720	1995	$ 3,849,848	0.84	$ 3,238,064
552	39720	1996	$ 596,067	0.83	$ 496,550
553	39720	1997	$ 704,601	0.83	$ 583,412
554	39720	1998	$ 301,231	0.83	$ 250,939
555	39720	1999	$ 234,481	0.85	$ 198,790
556	39720	2000	$ 293,907	0.87	$ 255,039
557	39720	2001	$ 20,208	0.88	$ 17,826
558	39720	2002	$ 85,722	0.91	$ 78,211
559	39720	2003	$ 408,932	0.94	$ 385,208
560	39720	2005	$ 266,540	0.99	$ 263,243
561	39720	2006	$ 169,755	1.00	$ 169,578
562	39720	2007	$ 3,458,415	1.00	$ 3,458,415
563	39720	Total	$ 14,659,312		$ 13,189,174
564 Com Miscellaneous Equip					
565	39800	1987	$ 358,283	1.55	$ 556,248
566	39800	1988	$ 471,423	1.50	$ 707,748
567	39800	1989	$ 54,877	1.45	$ 79,385
568	39800	1990	$ 109,456	1.39	$ 152,451
569	39800	1991	$ 206,831	1.35	$ 278,340
570	39800	1992	$ 73,860	1.32	$ 97,162

Common Plant
Reproduction Cost by Vintage Year

Line No.	(a)	(b) FERC Account	(c) Installation Year	(d) Original Cost	(e) Adjustment Factor	(f) Reproduction Cost
571		39800	1993	$ 107,818	1.29	$ 138,631
572		39800	1994	$ 85,256	1.26	$ 107,340
573		39800	1995	$ 57,073	1.23	$ 70,417
574		39800	1996	$ 170,381	1.21	$ 206,304
575		39800	1998	$ 63,172	1.18	$ 74,413
576		39800	1999	$ 8,227	1.16	$ 9,552
577		39800	2001	$ 3,058	1.11	$ 3,394
578		39800	2002	$ 469,186	1.09	$ 511,754
579		39800	2003	$ 338,568	1.07	$ 361,591
580		39800	2006	$ 11,897	1.02	$ 12,078
581		39800	Total	$ 2,589,365		$ 3,366,808
582						
583	GRAND TOTAL			$ 335,281,514		$ 635,511,819